Panasonic

Operating Instructions
Blu-ray Disc™ Recorder

Model No. **DMR-BCT845**
DMR-BCT745
DMR-BCT740
DMR-BST845
DMR-BST745
DMR-BST740

Thank you for purchasing this product.
Please read these instructions carefully before using this product, and save this manual for future use.

- **This unit is equipped with two CI/CI Plus slots. They can receive encrypted digital broadcast services.**

Software (Firmware) Update

Blu-ray Disc technology and broadcast services continue to add new features. As they evolve, firmware updates may be required to support the latest features. Panasonic strives to continually update firmware as new technology is released. It's very important you install the latest updates to maintain proper operation of your unit.

For details, refer to "Software (Firmware) Update" (⇨ 104) or http://panasonic.jp/support/global/cs/ (This site is in English only.)

EG

SQT0300

Safety precautions

WARNING

Unit

- To reduce the risk of fire, electric shock or product damage,
  - Do not expose this unit to rain, moisture, dripping or splashing.
  - Do not place objects filled with liquids, such as vases, on this unit.
  - Use only the recommended accessories.
  - Do not remove covers.
  - Do not repair this unit by yourself. Refer servicing to qualified service personnel.
  - Do not let metal objects fall inside this unit.
  - Do not place heavy items on this unit.

AC mains lead

- To reduce the risk of fire, electric shock or product damage,
  - Ensure that the power supply voltage corresponds to the voltage printed on this unit.
  - Insert the mains plug fully into the socket outlet.
  - Do not pull, bend, or place heavy items on the lead.
  - Do not handle the plug with wet hands.
  - Hold onto the mains plug body when disconnecting the plug.
  - Do not use a damaged mains plug or socket outlet.
- The mains plug is the disconnecting device. Install this unit so that the mains plug can be unplugged from the socket outlet immediately.

Small object

- Keep the Memory Card out of reach of children to prevent swallowing.

CAUTION

Unit

- This unit utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not place sources of naked flames, such as lighted candles, on this unit.
- This unit may receive radio interference caused by mobile telephones during use. If such interference occurs, please increase separation between this unit and the mobile telephone.
- This unit is intended for use in moderate climates.

Placement

- Place this unit on an even surface.
- To reduce the risk of fire, electric shock or product damage,
  - Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
  - Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
  - Do not expose this unit to direct sunlight, high temperatures, high humidity, and excessive vibration.

Batteries

- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- Mishandling of batteries can cause electrolyte leakage and may cause a fire.
  - Do not mix old and new batteries or different types at the same time.
  - Do not heat or expose to flame.
  - Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
  - Do not take apart or short circuit.
  - Do not recharge alkaline or manganese batteries.
  - Do not use batteries if the covering has been peeled off.
  - Remove batteries if you do not intend to use the remote control for a long period of time. Store in a cool, dark place.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.

Restriction on use of unauthorized copied content

This unit adopts the following technology for copyright protection.

Cinavia Notice

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted. More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

Supplied accessories

Please check and identify the supplied accessories.

(Product numbers are correct as of July 2014. These may be subject to change.)

Remote control (N2QAYB000986)**:** 1 pc.

Batteries for remote control: 2 pcs.

AC mains lead: 1 pc.

BCT845 BCT745 BCT740

RF coaxial cable: 1 pc.

- Do not use AC mains lead with other equipment.

About descriptions in these operating instructions

- These operating instructions are applicable to models DMR-BCT845, DMR-BCT745, DMR-BCT740, DMR-BST845, DMR-BST745 and DMR-BST740. The illustrations in these Operating Instructions show images of DMR-BCT845 unless otherwise indicated.
  - BCT845 : indicates features applicable to DMR-BCT845 only.
  - BCT745 BCT740 : indicates features applicable to DMR-BCT745/DMR-BCT740 only.
  - BST845 : indicates features applicable to DMR-BST845 only.
  - BST745 BST740 : indicates features applicable to DMR-BST745/DMR-BST740 only.
- Pages to be referred to are indicated as "⇨ ○○".

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HDD and media information

For more details, refer also to the specifications. (⇨ 118)

Recordable/playable contents

(–: Impossible)

Media type	Standard symbol		Recordable contents	Playable contents
Built-in hard disk drive (HDD)[*1]	HDD	HDD	• Video • AVCHD/AVCHD 3D • JPEG • MPO (3D photo) • MP3	
External hard disk drive (USB HDD)[*1] (⇨ 9)	USB-HDD	USB HDD	• Video[*2]	–	• AVCHD/AVCHD 3D[*3, 4] • MP4 • MPEG2 • Xvid • MKV • JPEG • MPO (3D photo) • MP3
BD-Video	BD-Video	BD-V	–	• Video
BD-RE[*1]	BD	BD-RE	• Video • AVCHD/AVCHD 3D • JPEG • MPO (3D photo)	
BD-R	BD	BD-R	• Video • AVCHD/AVCHD 3D[*3]	–	• Xvid • MKV
DVD-Video[*5]	DVD-Video	DVD-V	–	• Video
DVD-RAM[*1]	DVD	RAM	• Video • JPEG • MPO (3D photo)	–	• AVCHD[*3]
DVD-R **DVD-R DL**	DVD	DVD-R	• Video • AVCHD[*3]	–	• Xvid • MKV • JPEG • MPO (3D photo) • MP3

(–: Impossible)

Media type	Standard symbol		Recordable contents	Playable contents
DVD-RW※1	DVD	DVD-RW	• Video	
			–	• AVCHD※3
+R/+R DL		+R	• Video	
			–	• AVCHD※3
+RW※1		+RW	• Video	
			–	• AVCHD※3
Audio CD (CD-DA)	CD	CD	–	• Music
CD (including CD-R/RW)			–	• Xvid • MKV • JPEG • MPO (3D photo) • MP3
SD Cards※1	SD	SD	• JPEG • MPO (3D photo)	• AVCHD/AVCHD 3D※3 • MP4 • JPEG • MPO (3D photo)
USB memory	USB	USB	–	• AVCHD/AVCHD 3D※3, 4 • MP4 • MPEG2 • Xvid • MKV • JPEG • MPO (3D photo) • MP3

Playable contents as DLNA client

Refer to “Playable contents”. (⇨ 77)

※1 Rewritable media

※2 It cannot be recorded directly. (Only compatible with copying from the built-in HDD)

※3 Recorded with AVCHD format compatible devices (Panasonic video camera, etc.). It may not be able to play back, add, or edit depending on the device.

※4 It cannot be played back directly from the USB HDD or USB memory. Playback is possible by copying to the built-in HDD. (⇨ 81)

※5 Includes finalised DVD-R, DVD-R DL, DVD-RW, +R and +R DL.

- +RW This unit cannot record to 8X Speed +RW disc.
- The producer of the disc can control how discs are played. So you may not always be able to control play as described in these operating instructions. Read the disc’s instructions carefully.
- With certain recording states and folder structures, the play order may differ or playback may not be possible.

HDD and media information

About extension of files

MP4:	".MP4"	".mp4"	".MOV"	".mov"		
MPEG2:	".MPG"	".mpg"	".MPEG"	".mpeg"	".M2TS"	".m2ts"
	".MTS"	".mts"	".TS"	".ts"		
Xvid:	".AVI"	".avi"				
Subtitle text files:	".SRT"	".srt"	".SUB"	".sub"	".TXT"	".txt"
MKV:	".MKV"	".mkv"				
Subtitle text files:	".SRT"	".srt"	".SSA"	".ssa"	".ASS"	".ass"
	".SUB"	".sub"	".TXT"	".txt"		
JPEG:	".JPG"	".jpg"				
MPO:	".MPO"	".mpo"				
MP3:	".MP3"	".mp3"				

- The video file and subtitle text files are inside the same folder, and the file names are the same except for the file extensions.
- Some files may not be played back even if they have these extensions.

Recording mode

Recording Mode	DR	HG/HX/HE/HL/HM	XP/SP/LP/EP/FR
Feature	Programmes can be recorded in a nearly perfect broadcasted state.	Recording can be done with reduced recording volume in HD quality.	Recording can be done with reduced recording volume in SD quality.
Quality	Quality as the broadcast	High definition※1	Standard definition
Recordable media			
Multiple audio	Record all multiple audio	Record only one audio	
Subtitles / Teletext	Can be recorded	Can be recorded (only one subtitle or teletext)※2	
Surround audio	Surround audio as the broadcast	Surround audio produced by conversion of broadcast audio format	Stereo audio

※1 The SD quality programme cannot be converted to HD quality.

※2 You cannot select during play whether it appears or disappears.

Approximate recording times

Refer to "Recording modes and approximate recording times". (⇨ 121)

• FR (Flexible Recording Mode)

The unit automatically selects the best possible recording rate between XP mode and EP mode.

Notes

Notes for an External HDD (USB HDD)

You can use an external HDD in the following two ways. (A single HDD cannot handle those two ways simultaneously.)

- **For recorded titles**

  Moving titles in the built-in HDD to a USB HDD to save the capacity of the built-in HDD.
  - The USB HDD must first be registered on this unit. (⇨ 82)
- **For data files**

  Playing back MP4, JPEG, MP3, etc. (data files) in a USB HDD with this unit.
  - The USB HDD must be formatted in FAT12, FAT16, FAT32 and NTFS file system.
  - The USB HDD over 2 TB is not usable.

- This unit supports USB 2.0 High Speed.
- Although this unit can use USB 3.0 devices as USB 2.0 devices, in certain cases USB 3.0 devices cannot be used due to differing connector shape, larger current ratings, etc. (Use of USB 2.0 devices is recommended.)
- This unit does not recognize USB HDDs other than those in which the size of one sector is 512-bytes or 4096-bytes. (For details, consult the dealer of your USB HDD.)
- This unit does not guarantee connection with all USB devices.

Notes for the disc

- **Region management information**

The unit can play back BD-Video/DVD-Video discs of the following regions codes, including “ALL”:

e.g., BD-Video DVD-Video

- **Disc recorded on another device**
  - It may be necessary to finalize the disc, create Top Menu or close the session on the equipment used for recording to play on this unit.
  - DVD-RW Recorded in DVD Video Recording (DVD-VR) format
    - This unit can play back and copy to HDD.
    - This unit does not support editing or recording.
    - It is possible to record and edit with DVD-Video (DVD-V) format by formatting discs with this unit.
  - Recording may not be possible to discs which were used for recording on other equipment.
- **Play on other players**
  - BD-RE BD-R When these discs cannot be played back on other Blu-ray Disc players, etc. (e.g., title recorded with HE-AAC audio format), convert the recording mode to play them back. (⇨ 56, File Conversion)
  - DVD-R DVD-RW +R Finalisation is needed. (⇨ 106)
  - +RW If the disc failed to play on other equipment, we recommend you create a Top Menu (⇨ 106).
  - DVD-R The disc created in AVCHD format can only be played back on AVCHD compatible equipment.
- **Regarding 8 cm Disc**

  This unit cannot record or edit the 8 cm disc. Only playback or copy to the HDD is possible.
- **Discs that cannot be played**
  - DVD-RAM that cannot be removed from their cartridges
  - 2.6 and 5.2 GB DVD-RAM, 12 cm
  - DVD-Audio
  - HD DVD
  - Super Video CD, Super Audio CD, Video CD
  - CD-ROM, Photo CD, PD, etc.

- Operation and sound quality of CDs that do not conform to CD-DA specifications (copy control CDs, etc.) cannot be guaranteed.

HDD and media information

Notes for the SD cards

- **Compatible SD card**
  - SD Memory Card
    (from 8 MB to 2 GB, FAT12 and FAT16 formats)
  - SDHC Memory Card
    (from 4 GB to 32 GB, FAT32 format)
  - SDXC Memory Card
    (48 GB, 64 GB, exFAT format)

- **Using miniSD card or microSD card**
  Mini-type and micro-type cards can also be used, but must be used with adaptor cards (optional).

To format an SD card

Refer to “Format Disc/Format Card”. (⇨ 105)

- Usable memory is slightly less than the card capacity.
- If the SD card is formatted on other equipment, the time necessary for recording may be longer or the card may not be able to be used on this unit. In these cases, format the card on this unit.
- SDHC Memory Cards and SDXC Memory Cards can be used in equipment that is compatible with the appropriate cards. (SDHC Memory Cards can also be used in equipment compatible with SDXC Memory Cards)

Notes for the USB memories

USB memories support FAT12, FAT16, FAT32 and NTFS file systems.

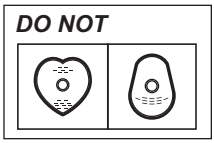
- The USB memory over 2 TB is not usable.
- This unit supports USB 2.0 High Speed.
- This unit does not guarantee connection with all USB devices.

Media handling

- Do not touch the recorded surface of the discs or the terminal surface of the SD cards.

- If there is dirt or condensation on the disc, wipe with a damp cloth and then wipe dry.

- Do not attach labels or stickers to discs.
- Do not use disc cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use ballpoint pens or other hard writing implements, when writing on the label side of the disc.
- Do not drop, stack, or impact discs.
- Do not place objects on discs.
- Do not use the following discs:
  - Discs with exposed adhesive from removed stickers or labels (rental discs, etc.).
  - Discs that are badly warped or cracked.
  - Irregularly shaped discs.



- Do not expose the terminals of the SD card to water, garbage or other strange things.
- Do not place in the following areas:
  - In hot places, such as under the direct sunlight.
  - In very dusty or humid areas.
  - Locations susceptible to significant difference in temperature (condensation can occur).
  - Where static electricity or electromagnetic waves occur.

Unit care

HDD/USB HDD handling care

- **The HDD is a high precision device**
  The HDD is a high precision recording instrument and is easily susceptible to damage. Therefore, be careful of the following points while the unit is turned on, especially during operation, otherwise the HDD and the recorded content may be damaged:
  - Do not subject the unit to any vibration and shock.
  - Do not remove the AC mains lead from the household mains socket.

- **The HDD is a temporary storage device**
  - The HDD is not an everlasting storage device. It is recommended to save the recorded content on a disc or to keep the original data or CDs that they were copied from.
  - If you notice a problem with the HDD such as repetitive strange sounds, immediately save (backup) all content and request service. If you continue using the HDD with a problem, the unit or the recorded content will be damaged.

- **If the HDD or USB HDD is damaged, the recorded content cannot be recovered.**

Setup precautions

- **Place the unit on a surface that is flat and not subject to vibration or impact.**
- **Do not place on anything that generates heat like a Set Top Box, etc.**
- **Place in an area where condensation does not occur. Conditions where condensation may occur**
  - When there is an extreme change in temperature (e.g., when subjected to an air conditioner or when cooled air directly impacts the unit).
  - When there is high humidity or a lot of steam in the room.

  In the above situation, **without turning the unit on**, let the unit adjust to the room temperature and wait 2–3 hours until condensation is gone.
- **The unit may breakdown if cigarette smoke or bug spray/vapour, etc. gets inside the unit.**

When moving the unit

Before moving the unit, ensure the disc tray is empty.

1. Switch the unit to standby mode. (Wait until “Goodbye” disappears from the display.)
2. Remove the AC mains lead from the household mains socket.
3. Move only after the unit has come to a complete stop (approx. 3 minutes) in order to avoid subjecting to vibration and shock. (Even after the unit is switched to standby mode, the HDD continues operating for a short time.)

Cleaning

- **This unit**
  - Wipe with a soft, dry cloth.
  - Never use alcohol, paint thinner or benzine to clean this unit.
  - Before using chemically treated cloth, carefully read the instructions that came with the cloth.

- **This unit’s lens**
  - Use the **Lens cleaner** (optional) to clean the unit’s lens.

Lens cleaner: RP-CL720AE
- This lens cleaner may not be available for sale in all countries, e.g. not available in Germany, please consult your Panasonic dealer for advice.

When requesting this unit for repair

The registration of the USB HDD may be cancelled in the process of repairing this unit. You can use the USB HDD again by re-registering, but all recorded content already on the USB HDD will be lost. In such cases, the recorded content (data) cannot be recovered.

To dispose or transfer this unit

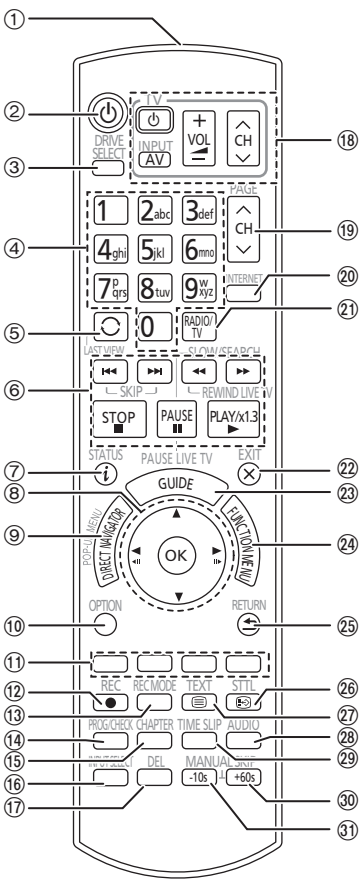
This unit may contain private information. Before disposing of or transferring this unit, perform the following to delete the data, including personal or secret information:

- Format HDD (⇨ 87, 95)
- Perform “Shipping Condition” (⇨ 87, 103)

Control reference guide

Instructions for operations are generally described using the remote control.

Remote control



① Transmit the remote control signal
- Point it at remote control signal sensor on this unit. (⇨ 13)

② Switch the unit from on to standby mode or vice versa

③ Select drive (HDD, BD, SD or USB)

④ Select channels and title numbers, etc./Enter numbers or characters

⑤ Switch to the previously watched channel (⇨ 29)

⑥ Basic operations for recording and play, REWIND LIVE TV/PAUSE LIVE TV (⇨ 33)

⑦ Show Information (⇨ 31, 45, 50)

⑧ Selection/OK, Frame-by-frame (⇨ 51)

⑨ Show DIRECT NAVIGATOR, Top Menu, Pop-up Menu (⇨ 44)

⑩ Show OPTION menu (⇨ 54, 69, 74)

⑪ Colour buttons (Use in accordance with instruction on the screen.)

⑫ Start recording (⇨ 34, 80)

⑬ Select a conversion mode/recording mode (⇨ 34, 80)

⑭ Show the Timer Recording screen (⇨ 39)

⑮ Create chapter (⇨ 51)

⑯ Input select (⇨ 29, 80)

⑰ To delete unwanted recorded titles, timer programmes, photos or music (⇨ 54)

⑱ TV operation buttons (⇨ 22)

⑲ Channel select (⇨ 29)/Change pages in the DIRECT NAVIGATOR screen etc.

⑳ Show the Network Service screen (⇨ 79)

㉑ Switching to the radio channel list (⇨ 29)

㉒ Exit the menu screen

㉓ Show the TV Guide screen (⇨ 30)

㉔ Show the FUNCTION MENU screen (⇨ 28)

㉕ Return to previous screen

㉖ Show subtitles (⇨ 31, 52)

㉗ Show Teletext (⇨ 32, 52)

㉘ Select audio (⇨ 31, 52)

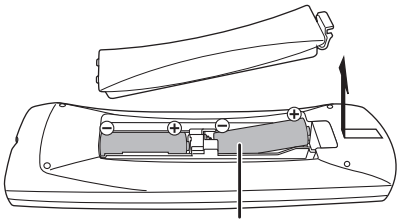
㉙ Skip the specified time (⇨ 51)

㉚ Skip approx. 1 minute forward (⇨ 51)

㉛ Skip approx. 10 seconds backward (⇨ 51)

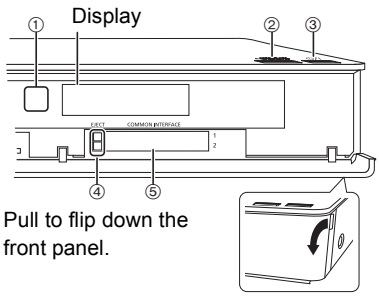
Insert batteries

Insert so the poles (+ and −) match those in the remote control.



R6/LR6, AA
(Alkaline or manganese batteries)

Main unit



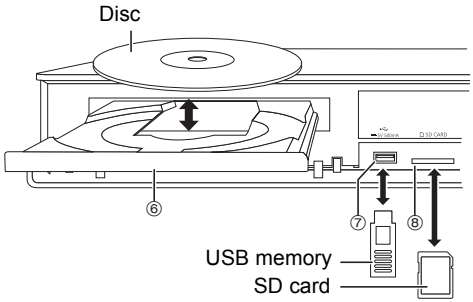
① Remote control signal sensor
- Angle: Approx. 20° up and down, 30° left and right
- Distance: Within approx. 7 m in front of the unit

② Open/close disc tray

③ **Standby/on switch (⏻/I)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

④ CI module eject button (⇨ 14)

⑤ CI (Common Interface) slot (⇨ 14)



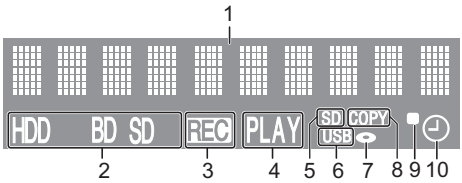
⑥ Disc tray

⑦ USB port

⑧ SD card slot
- When removing the SD card, press on the centre of the card and pull it straight out.

- While writing to/reading from the media, do not switch the unit to standby mode or remove the media. Such action may result in loss of the media contents.
- When inserting the media, ensure that it is facing the right way up.

Display



1 Main display section indicator
- Current time
- Name of a broadcasting station
- Playback counter
- Various messages (⇨ 115), etc.

2 Drive (HDD, BD or SD) indicator

3 Recording indicator
- The indicator will light up while recording.
- The indicator will blink while recording is paused and before recording starts.

4 Playback indicator

5 SD card slot indicator

6 USB port indicator

7 Disc indicator

8 Copying indicator

9 Remote control signal indicator

10 Timer recording indicator
This indicator lights up when the timer recording standby or Keyword Recording※ standby is activated.

※ **BCT845** **BST845** only

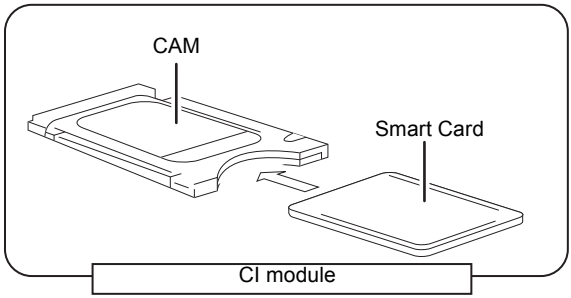
CI (Common Interface) module

An appropriate CI module is required to view or record the encrypted broadcast.

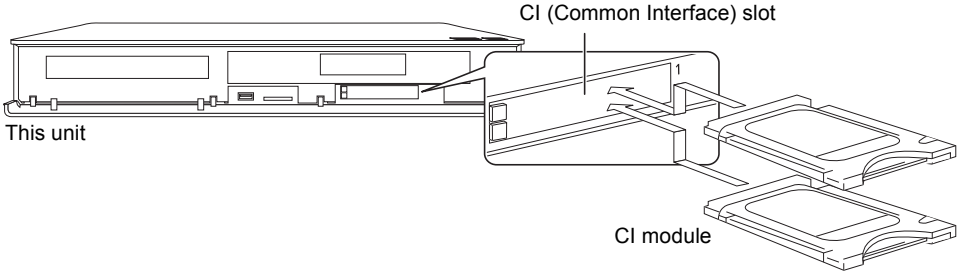
You need a CI module, CAM (Conditional Access Module) together with a certified Smart Card, and a subscription with the corresponding broadcaster.

• If not viewing/recording an encrypted broadcast, you do not need to insert the CI module.

1 Insert the certified Smart Card into the CAM (both optional).



2 Insert the CI module into the CI (Common Interface) slot of this unit.



TV service encryption is automatically decrypted and the broadcast can be viewed or recorded. (The recording might be prohibited by broadcasters.)

• Some CAMs may request a PIN. If prompted to enter a PIN code, enter the PIN code with the number buttons.

• If the PIN is not entered, timer recording may not work correctly. The PIN for timer recording can be entered later. (⇨ 87, 94, PIN Entry for Decrypt Recording)

Notes for recording of an encrypted broadcast (⇨ 36)

- You can insert one or two different CAMs with Smart Cards into this unit.
- Be sure to insert the CI module horizontally into the slot.
- Insert the CAM and the Smart Card with the correct direction.
- When removing the CI module, press the CI module eject button and pull it straight out.
- For more details, see the manual of the CAM and Smart Card, or consult the dealer.
- The Common Interface supports the modules that comply with DVB Specification and CI Plus Specification.
- Turn off the unit before you insert or remove the CI module.

About CI Plus compatible broadcast

"CI Plus" is a technical specification that imposes contents protection, etc.

CI Plus contents protection

When the CI Plus compatible broadcast is recorded, the title may be contents protected. There are following types of the contents protection depending on the broadcast:

- **Copying not restricted**
  Depending on the title, you can copy/move only to USB HDD, BD-RE, BD-R, or DVD-RAM (CPRM compatible discs only).

- **One generation copy is permitted**
  You can copy to BD-RE, BD-R or DVD-RAM (CPRM compatible discs only) only once.
  - The original title will be deleted.
  - You cannot copy from the copied BD-RE, BD-R or DVD-RAM (CPRM compatible discs) to HDD or another disc.

  When convert recording mode, the original title will be deleted.

  - icon will appear on the DIRECT NAVIGATOR screen. (⇨ 44)

- **Copying is prohibited**
  You cannot copy/move to the USB HDD or disc.
  The content of these media may also have the following playback restrictions.
  - Retention limit (⇨ right)
  - Content License (⇨ right)

Retention limit

There are some titles for which the playback will be disabled after a predetermined time.
(e.g., Permitted playback period is 90 minutes after recording.)

- When the title does not have playback period, icon will appear on the DIRECT NAVIGATOR screen after decrypting. (⇨ 44)
- When the title has playback period, or icon will appear on the DIRECT NAVIGATOR screen after decrypting. (⇨ 44)

Content License

Playing back a title with this restriction requires a CAM with a playback licence for it.

- The number of times the title can be played back may also be limited.
- When the title does not have playback period, icon will appear on the DIRECT NAVIGATOR screen after decrypting. (⇨ 44)
- When the title has playback period, icon will appear on the DIRECT NAVIGATOR screen after decrypting. (⇨ 44)

Parental Control

Playing back a title with this restriction requires a CAM and enter the PIN code.

- CAM G icon will appear on the DIRECT NAVIGATOR screen. (⇨ 44)

Operator profile

Depending on your CAM, the channel list can be updated to the one recommended by the CAM.
For details, refer to "About Operator profile". (⇨ 32)

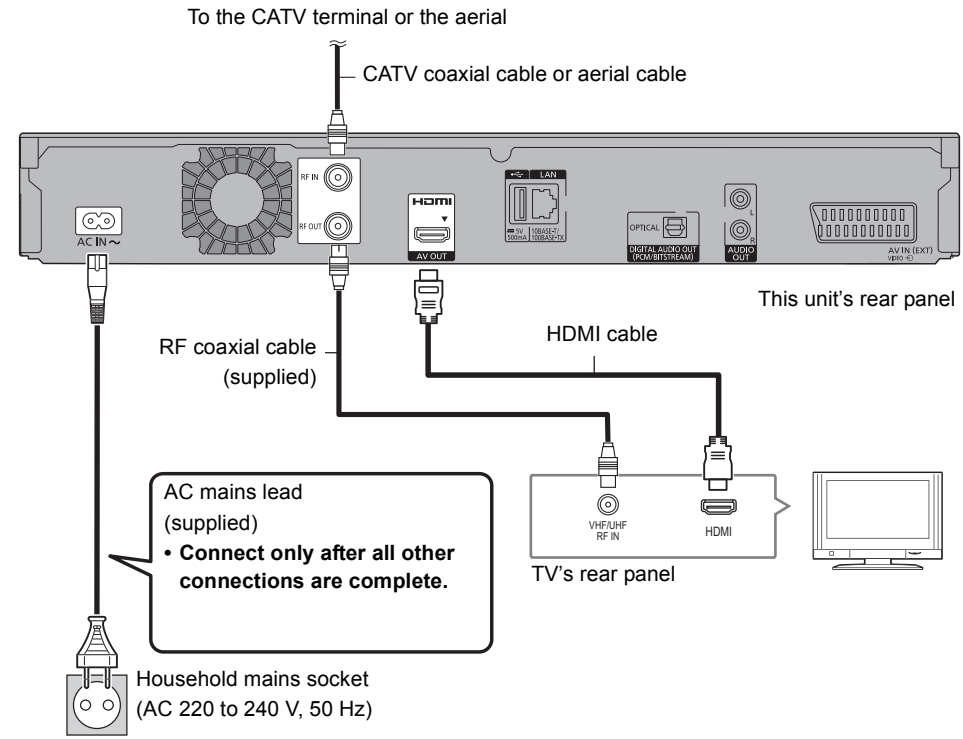
- All CI Plus compatible broadcasts are encrypted. It may take some time to display them.
- For details, refer to your CAM's operating instructions or consult your dealer.

Connection

3D programmes or 4K images can be played back when this unit is connected to a 3D or 4K compatible TV.

- Before connection, turn off all equipment and read the appropriate operating instructions.
- To enjoy 4K output, you need to connect this unit to a 4K compatible TV.
- When outputting 1080p or 24p (4K) signal, please use HDMI cables 5.0 meters or less.
  It is recommended that you use Panasonic's HDMI cable.
- In case problems occur for the playback of content such as no picture or picture distortion, check the HDMI cable, related connections and the compatibility of TV video input.
  To output images in 4K, connect the HDMI cable to a 4K compatible terminal of the connected device.

BCT845 BCT745 BCT740 Basic connections



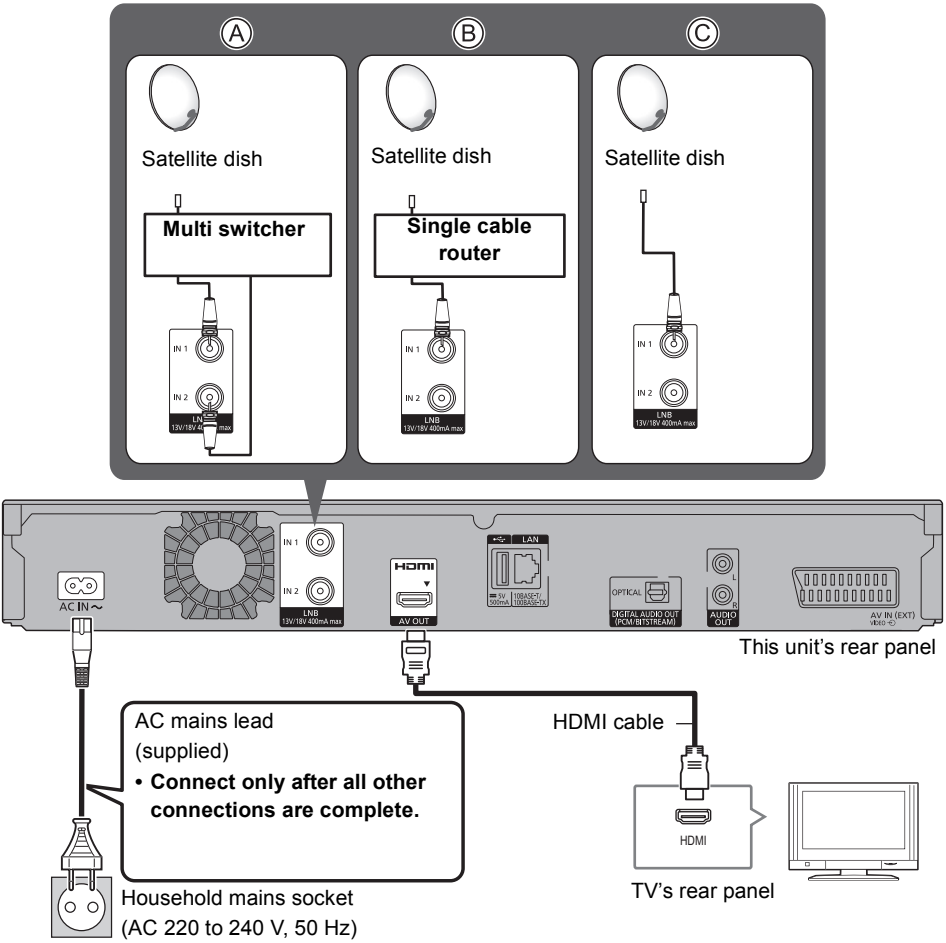
BST845 BST745 BST740 Basic connections

The following three connection methods are available. Choose a method suited to your environment.

Ⓐ Using a multi switcher:
You can record two programmes simultaneously.
• Connect both LNB IN 1 and LNB IN 2 to the satellite dish.

Ⓑ Using a single cable router:
You can record two programmes simultaneously.
• Connect satellite cable to LNB IN 1 terminal.

Ⓒ Connecting a satellite cable directly:
You cannot record two programmes simultaneously.
• Connect LNB IN 1 terminal to the satellite dish.



Connection

General information for Basic connections

To connect and register the USB HDD (optional)

Refer to “Registering the external HDD (USB HDD)”. (⇨ 82)

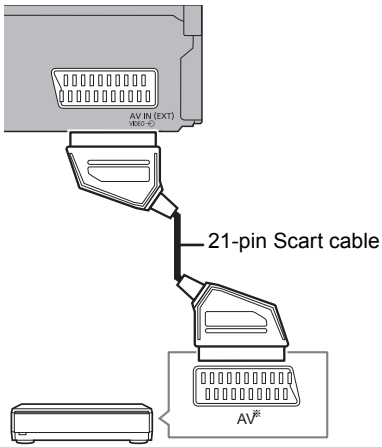
About HDMI cable

Use the High Speed HDMI cables.
Non-HDMI-compliant cables cannot be utilized.
It is recommended that you use Panasonic’s HDMI cable.
When outputting 1080p signal or 24p(4K) signal, please use HDMI Cables 5.0 meters or less.

When the unit is not to be used for a long time
To save power, unplug it from the household mains socket. This unit consumes a small amount of power, even when the unit is in standby mode.
BCT845 **BCT745** **BCT740**
[approx. 0.2 W (“Quick Start” is not activated and “RF OUT (Aerial Signal)” is set to “Off”)]
BST845 **BST745** **BST740**
[approx. 0.2 W (“Quick Start” is not activated)]

- This unit cannot connect the TV that does not have the HDMI terminal.
- The HDMI connection supports VIERA Link “HDAVI Control” (⇨ 84).
- You cannot connect this unit to DVI devices that are incompatible with HDCP.
  Depending on the device, images may not display properly or at all when connecting with a DVI/HDMI switching cable. (Audio cannot be output.)
- If you are connecting to a TV that is only compatible with 2 channel audio output, audio with 3 channels or more will be down mixed and output as 2 channels, even if connecting with an HDMI cable. (Some discs cannot be down mixed.)
- **BCT845** **BCT745** **BCT740**
  Keep the RF coaxial cables as far away as possible from other cables.

Connect the Set Top Box or video equipment



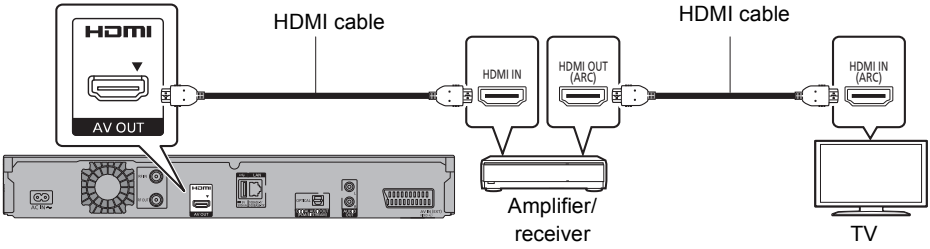
※ A 21-pin Adaptor is required for AUDIO/VIDEO terminal.

Amplifier/receiver connections

HDMI terminal

3D programmes or 4K images can be played back when this unit is connected to a 3D or 4K compatible amplifier/receiver and a 3D or 4K compatible TV.

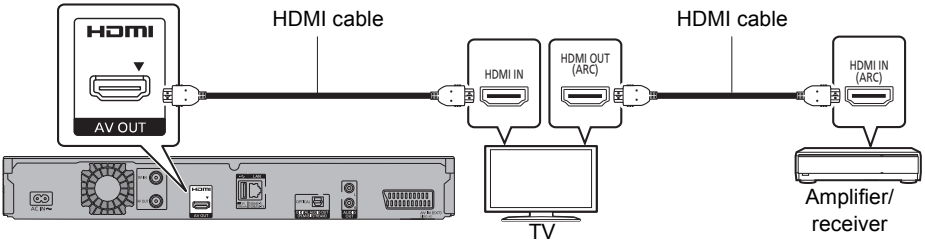
- You will not be able to view 3D programmes or 4K images with this connection if your amplifier/receiver is not 3D or 4K compatible.



■ **Amplifier/receiver not compatible with 3D or 4K**

3D programmes or 4K images can be played back when this unit is connected to a 3D or 4K compatible TV.

- This connection only supports up to 5.1ch.

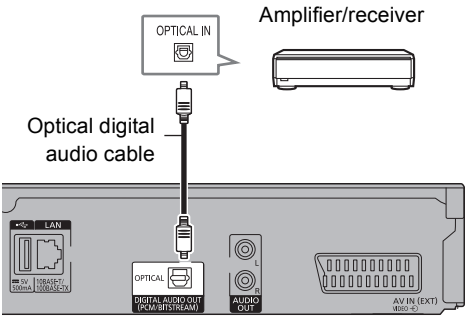


- VIERA Link function is possible by connecting to a TV or amplifier/receiver compatible with VIERA Link.
- When using a TV or an amplifier/receiver that does not display “ARC” on the HDMI terminal, it is necessary to connect the TV and the amplifier/receiver with a digital audio cable to enjoy the TV audio on the amplifier/receiver.

Connection

DIGITAL AUDIO OUT terminal

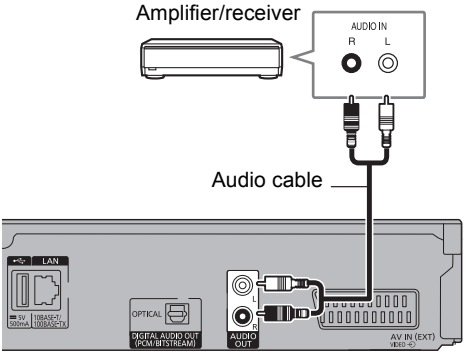
■ Using Optical digital audio cable



- When you do not want the audio to be output from the TV, set “HDMI Audio Output” to “Off” (⇨ 87, 98).

AUDIO OUT terminal

- Connect to terminals of the same colour.



Network connection

When this unit is connected to the network, you can enjoy network functions (DLNA function, Network Service, Remote Viewing and Recording, etc.).

For details about connection method, refer to the instructions supplied with the connected equipment.

After you make the LAN cable/Wireless LAN connection, the network setting is needed. (⇨ 26, Easy Network Setting)

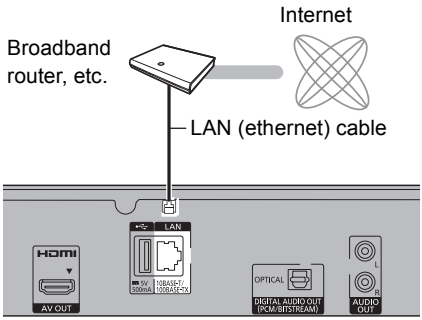
■ Precautions of Wireless LAN connection

The following limits are in place regarding the usage of this unit. You must be aware of these limits before using this unit.

Panasonic will in no way be responsible for any incidental damage which may arise due to a failure to obey these limits, or to any condition of use or disuse of this unit.

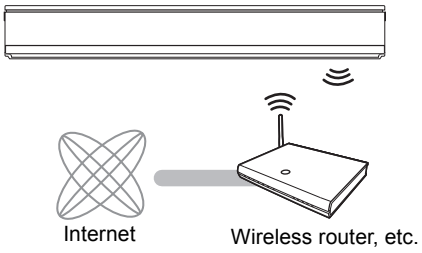
- **Data transmitted and received over radio waves may be intercepted and monitored.**
- **This unit contains delicate electronic components.**
  Please use this unit in the manner in which it was intended and follow the following points:
  - Do not expose this unit to high temperatures or direct sunlight.
  - Do not bend, or subject this unit to strong impacts.
  - Keep this unit away from moisture.
  - Do not disassemble or alter this unit in any way.

LAN cable connection



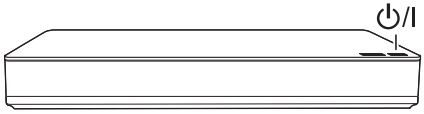
- Use category 5 or above straight LAN cables (STP) when connecting to peripheral devices.
- Inserting any cable other than a LAN cable in the LAN terminal can damage the unit.

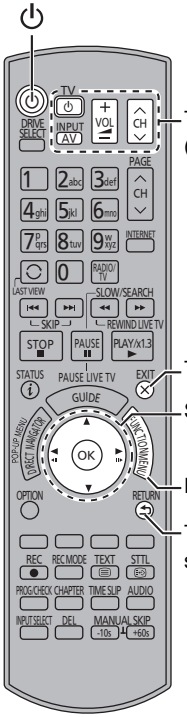
Wireless LAN connection



- For up-to-date compatibility information on your Wireless router refer to http://panasonic.jp/support/global/cs/ (This site is in English only.)
- The unit is not compatible with public wireless LAN services.

Settings




TV operation buttons (⇨ right)
To exit the screen
Select and enter buttons
FUNCTION MENU (⇨ 28)
To return to the previous screen

TV operation buttons

The TV can be operated from the TV operation buttons of the remote control.

- Perform the setting if you cannot operate the TV with the TV operation buttons.
  While pressing [TV ⏻], enter the code with the number buttons.

Manufacturer and Code No.

Brand	Code	Brand	Code
Panasonic	01/02/03/04	NEC	36
AIWA	35	NOBLEX	33
AKAI	27/30	NOKIA	25/26/27/60/61
BEKO	05/71/72/73/74	NORDMENDE	10
BENQ	58/59	OLEVIA	45
BRANDT	10/15	ONWA	30/39/70
BUSH	05	ORION	05
CENTREX	66	PEONY	49/69
CURTIS	05	PHILCO	41/48/64
DAEWOO	64/65	PHILIPS	05/06/46
DESMET	05	PHONOLA	05
DUAL	05	PIONEER	37/38
ELEMIS	05	PROVIEW	52
FERGUSON	10/34	PYE	05
FINLUX	61	RADIOLA	05
FISHER	21	SABA	10
FUJITSU	53	SALORA	26
FUNAI	63/67	SAMSUNG	32/42/43/65/68
GOLDSTAR	05/50/51	SANSUI	05
GOODMANS	05	SANYO	21/54/55/56
GRADIENTE	36	SCHNEIDER	05/29/30
GRUNDIG	09	SEG	05/69/75/76/77/78
HITACHI	05/22/23/40/41	SELECO	05/25
IRRADIO	30	SHARP	18
ITT	25	SIEMENS	09
JVC	17/30/39/70	SINUDYNE	05
KDS	52	SONY	08
KOLIN	45	TCL	31/33/66/67/69
KONKA	62	TELEFUNKEN	10/11/12/13/14
LG	05/50/51	TEVION	52
MAG	52	THOMSON	10/15/44
METZ	05/28/79	TOSHIBA	16/57
MITSUBISHI	05/19/20/47	WHITE WESTINGHOUSE	05
MIVAR	24	YAMAHA	18/41

- If your TV brand has more than one code listed, select the one that allows correct operation.
- If the brand of your TV is not listed or the code number is invalid for your TV, this remote control is not compatible with your TV.

BCT845 BCT745 BCT740 Easy Setting

The tuner in this unit is compatible with digital Cable broadcast services and digital terrestrial broadcast services.

- In these operating instructions,
  DVB-C : indicates features applicable to digital cable broadcasts (DVB-C).
  DVB-T : indicates features applicable to digital terrestrial broadcasts (DVB-T).
- This unit can receive only one of the two services at a time.

1 Turn on the TV, then select the appropriate AV input to suit the connections to this unit.

2 Press [⏻] on the remote control or [⏻/I] on this unit.
- The Easy Setting will start at the initial power on.

3 Select language, then press [OK].

4 Select country, then press [OK].

5 Select “Digital Cable (DVB-C) Channels” or “Digital Terrestrial (DVB-T) Channels”, then press [OK].

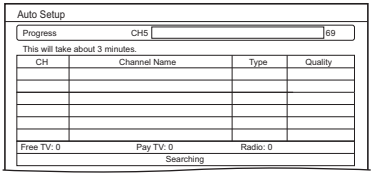
① DVB-C
Select the channel number allocation, then press [OK].
- For Germany and Austria:
  Normally set to “Preset Channel Number”.
- For Switzerland:
  Normally set to “Operator’s Channel Number (LCN)”.

- To change channel allocation, restart Auto Setup in Basic Settings menu and change channel number allocation selection. (⇨ 92)

② DVB-C
Select “Start Auto Setup”, then press [OK].
- **Frequency**
  - **Auto**
    The preset frequency will be automatically used.
  - **Manual**
    Enter the frequency specified by your cable provider with number buttons.
- **Network ID**
  - **Auto**
    The preset Network ID will be automatically used.
  - **Manual**
    Enter the Network ID specified by your cable provider with number buttons.

- Frequency and Network ID settings may be necessary depending on the cable provider. For details, consult the cable provider.

6 Auto Setup will start automatically.
(This operation may take some time.)
e.g., DVB-T



DVB-C
When tuning is completed, press [OK].

7 Clock will be set automatically.
If the clock setting screen appears, set the time manually (⇨ 102, Clock).

Settings

8 Set Quick Start to “On”, “Off” or “Timer Setting for Quick Start”, then press [OK].

- **On**
  It is possible to start quickly from standby mode.
- **Off**
  Power consumption in standby mode is minimized. (⇨ 118)
  However, startup time from standby mode will be longer.
- **Timer Setting for Quick Start**
  “Quick Start” is activated when the set time comes.

9 Select the item to match the type of TV connected.
For details, refer to “TV Aspect”. (⇨ 98)

When “Easy Setting has been completed.” appears, Easy Setting is complete.

- Select “Yes” to proceed to “Easy Network Setting”. (⇨ 26)
- Select “No” to finish the Easy Setting.

To stop partway

Press [RETURN ⮌].

To restart setup or change TV signal type

1 Press [FUNCTION MENU]. (⇨ 22)
2 Select “Basic Settings” in “Setup”, then press [OK].
3 Select “Auto Setup” in “DVB Tuning”, then press [OK].
4 Select “Yes”, then press [OK].
  - If you are asked to select the auto setup method, refer to “Auto Setup”. (⇨ 89)

To confirm that channels have been tuned correctly

Refer to “Using Channel List”. (⇨ 30)

- If tuning is cancelled partway through, it may not be possible to receive the channels. Restart setup again.

BST845 BST745 BST740 Easy Setting

1 Turn on the TV, then select the appropriate AV input to suit the connections to this unit.

2 Press [⏻] on the remote control or [⏻/I] on this unit.
- The Easy Setting will start at the initial power on.

3 Select language, then press [OK].

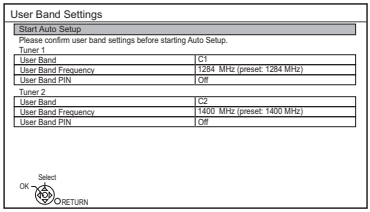
4 Select country, then press [OK].

5 Select the search mode, then press [OK].

6 Select “DiSEqC (Dual Tuner)”, “Single Cable System” or “DiSEqC (Single Tuner)”, then press [OK].

When selecting “Single Cable System”

1 Make the settings of user band.



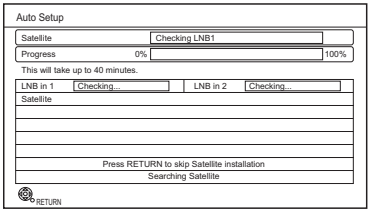
- **User Band**
  You can set C1 to C8. Set to a User Band not used by any other device.
  - When only one User Band of the Router is assigned, set “Tuner 2” to “OFF”. Note that you will not be able to record two programmes simultaneously.
- **User Band Frequency**
  Set the User Band Frequency with number buttons.
- **User Band PIN**
  If the single cable router requires a PIN to access an user band, enter the PIN.
  - For details, read the manual of the single cable router, etc.

2 Select “Start Auto Setup”, then press [OK].

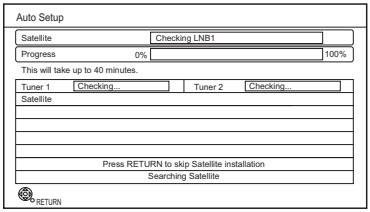
Auto Setup starts.

These operations (Searching Satellite and Searching Channels) may take some time.

- When selecting “DiSEqC (Dual Tuner)” or “DiSEqC (Single Tuner)”



- When selecting “Single Cable System”



After tuning has been completed, clock will be set automatically.
If the clock setting screen appears, set the time manually (⇨ 102, Clock).

7 Set Quick Start to “On”, “Off” or “Timer Setting for Quick Start”, then press [OK].

- **On**
  It is possible to start quickly from standby mode.
- **Off**
  Power consumption in standby mode is minimized. (⇨ 118)
  However, startup time from standby mode will be longer.
- **Timer Setting for Quick Start**
  “Quick Start” is activated when the set time comes.

Settings

8 Select the item to match the type of TV connected.
For details, refer to “TV Aspect”. (⇨ 98)

When “Easy Setting has been completed.” appears, Easy Setting is complete.

- Select “Yes” to proceed to “Easy Network Setting”. (⇨ right)
- Select “No” to finish the Easy Setting.

To stop partway

Press [RETURN ⮌].

To restart setup

1 Press [FUNCTION MENU]. (⇨ 22)
2 Select “Basic Settings” in “Setup”, then press [OK].
3 Select “Auto Setup” in “DVB Tuning”, then press [OK].
4 Select the search mode, then press [OK].
5 Select “Yes”, then press [OK].
- If you are asked to select the auto setup method, refer to “Auto Setup”. (⇨ 92)

To confirm that channels have been tuned correctly

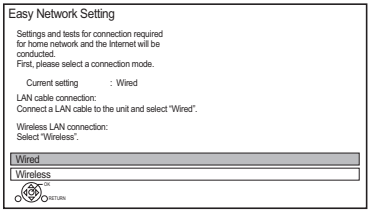
Refer to “Using Channel List”. (⇨ 30)

- If tuning is cancelled partway through, it may not be possible to receive the channels. Restart setup again.

Easy Network Setting

After completing “Easy Setting”, you can continue with “Easy Network Setting”.

1 Select “Wired” or “Wireless”, then press [OK].


Easy Network Setting
Settings and tests for connection required for home network and the Internet will be conducted.
First, please select a connection mode.
Current setting : Wired
LAN cable connection:
Connect a LAN cable to the unit and select “Wired”.
Wireless LAN connection:
Select “Wireless”.
Wired
Wireless
OK
RETURN

2 Follow the on-screen instructions and make the following confirmation and settings.

“Wired” connection:

- Home Network Connection Check
- Home Network function
- Remote Viewing and Recording
- Internet Connection Test

“Wireless” connection:

- Before beginning wireless connection setup obtain your Network name (SSID). An SSID (Service Set IDentification) is a name used by wireless LAN to identify a particular network. Transmission is possible if the SSID matches for both devices.
- Wireless Connection Check
- Home Network Connection Check
- Home Network function
- Remote Viewing and Recording
- Internet Connection Test

3 When “Easy Network Setting is finished.” appears.
Press [OK].

Connection method to wireless access point

Search for wireless network:

1 Select “Search for wireless network”, then press [OK].

2 The available wireless networks will be displayed. Select your network name and press [OK].
- If your Network name is not displayed, search again by pressing the red button on the remote control.
- Stealth SSID will not be displayed. Enter manually by using “Wireless Settings”. (⇨ 87, 99)

• If your wireless network is encrypted, Encryption Key Input Screen will be displayed.
Input the encryption key of your network.

WPS (PUSH button):

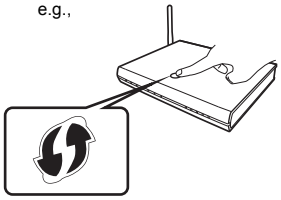
If your Wireless router supports WPS (PUSH button), you can easily perform the settings by pressing WPS button on it.

WPS (Wi-Fi Protected Setup™) is a standard that facilitates settings relating to the connection and security of wireless LAN devices.

1 Select “WPS (PUSH button)”, then press [OK].

2 Press WPS button or corresponding button of Wireless router until the lamp starts flashing.

e.g.,



- Wi-Fi Protected Setup™-compatible Wireless router may have the mark.
- For details, refer to the operating instruction of Wireless router.

3 Press [OK].

When you experience problems

Refer to “When you experience problems with Easy Network Setting”. (⇨ 117)

To restart Easy Network Setting

1 Press [FUNCTION MENU]. (⇨ 22)
2 Select “Basic Settings” in “Setup”, then press [OK].
3 Select “Easy Network Setting” in “Network”, then press [OK].

To redo settings individually

If “Easy Network Setting” did not work properly or when you change the settings individually, perform the following steps:

1 Press [FUNCTION MENU]. (⇨ 22)
2 Select “Basic Settings” in “Setup”, then press [OK].
3 Select “Network Settings” in “Network”, then press [OK].
4 Refer to “Network Settings”. (⇨ 99)

Check security before using Home Network function

If you set “Home Network function” to “On”, all connected devices on the same network can access this unit. Ensure that the router for your home network has adequate security system to prevent unauthorized access.

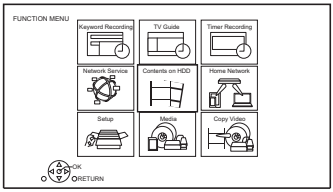
- Refer to the operating instructions of the hub or router.
- If you set “Home Network function” or “Remote Viewing and Recording” to “On”, the setting for “Quick Start” is fixed to “On”.
- Do not use this unit to connect to any wireless network for which you do not have usage rights.
  During automatic searches in a wireless network environment, wireless networks (SSID) for which you do not have usage rights may be displayed; however, using these networks may be regarded as illegal access.
- After performing network settings on this unit, the settings (encryption level, etc.) of the Wireless router might change. When you have trouble getting online on your PC, perform the network settings on your PC in accordance with the settings of Wireless router.
- Please be aware that connecting to a network without encryption may result in the content of the communication being illegitimately viewed by a third party, or the leaking of data such as personal or secret information.

FUNCTION MENU screen

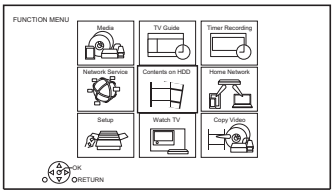
You can easily access the desired functions, such as playback, timer recording, the unit's settings etc. via the FUNCTION MENU.

1 Press [FUNCTION MENU].

BCT845 **BST845**

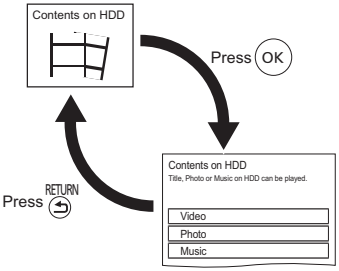


BCT745 **BCT740** **BST745** **BST740**



2 Select the item, then press [OK].

e.g.,



FUNCTION MENU list

- **BCT845** **BST845**
  Keyword Recording (⇨ 42)
- **TV Guide (⇨ 30)**
- **Timer Recording (⇨ 39)**
- **Network Service (⇨ 79)**
- **Contents on HDD**
  - Video (⇨ 44)
  - Photo (⇨ 67)
  - Music (⇨ 72)
- **Home Network**
  - Miracast (⇨ 78)
  - DLNA Client (⇨ 76)
  - Media Renderer (⇨ 77)
  - Wi-Fi Direct (⇨ 78)
- **Setup**
  - Basic Settings (⇨ 87)
    - You can change the unit's settings of DVB Tuning, Sound, Display, Connection, Network etc.
  - Remote Viewing and Recording (⇨ 79)
  - Wallpaper
    Personalize a background of the FUNCTION MENU.
    - To select from among "Photo", register photo in advance. (⇨ 68)
  - BD-Video Data Management (⇨ 49)
- **Media**
  - Disc
  - SD Card
  - USB device
  - USB HDD
- **BCT745** **BCT740** **BST745** **BST740**
  Watch TV (⇨ 30)
- **Copy Video**
  - Copy Menu (⇨ 61)
  - Copy Video (AVCHD) to DVD-R (⇨ 66)

Watching broadcasts

Instructions for operations are generally described using the remote control. (⇨ 12)

1 **Press [INPUT SELECT] and select “TV”, then press [OK].**
- If the Operator profile is being updated, a different display may appear on the screen. (⇨ 32)

2 **Press [CH ∧ ∨] to select the channel.**
- You can also select the channel by the following operations.
  - Using number buttons
  - Using Channel List (⇨ 30)
  - Using TV Guide system (⇨ 30)
  - Using channel information (⇨ 31)

To switch to the channel you have previously watched

Press [LAST VIEW ⟲].
- This function will work only for the channels you have watched for more than 10 seconds.

To switch to the radio channels or to the all channels

Press [RADIO/TV].

📖
- Selection of channel is made easy by creating a Favourite of the channels. (⇨ 89, 91, Favourites Edit)
- When you are watching the 3D programme, subtitles and TV Guide, etc., may not display correctly depending on the settings. (⇨ 52, 53, 3D Type, Signal Format)

If this unit request a PIN

Enter the PIN with the number buttons by following the on-screen instructions.
- **If you decide on a PIN, make a note it in case you forgot it.**
- PIN (except CAM’s) can be changed via “PIN Entry”. (⇨ 102)
- For CAM’s PIN, refer to your CAM’s operating instructions.

If encrypted channels do not appear

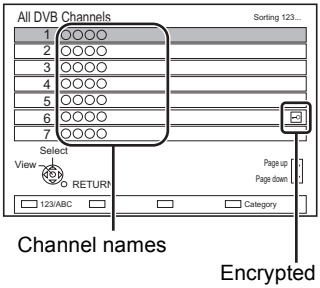
To watch an encrypted broadcast, insert the CI module into the CI slot. (⇨ 14)
- Set according to the CI module. (⇨ 87, 99, Common Interface)

Watching broadcasts

Using Channel List

You can select from the list of channel names.

1 Press [OK].



- To sort the channel, press the red button.
- To change the category, press the blue button.

2 Select the channel, then press [OK].

To skip unwanted channels

The channel is skipped next time you select the channel.

1 While watching the broadcast to skip, press [DEL].
2 Press [OK].

- **BCT845** **BCT745** **BCT740**

  DVB-T You cannot skip channels.

- You can select the skipped channel with the number buttons.
- When you want to restore the skipped channel, edit the channel list. (⇨ 87, 92)

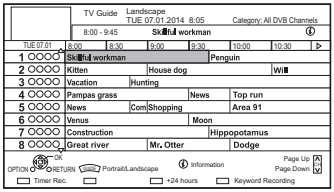
To edit the channel list

Refer to “Channel List”. (⇨ 92)

Using TV Guide system

1 Press [GUIDE].

e.g. Landscape view (**BCT845** **BST845**)



TV Guide screen appears.

2 Select the programme, then press [OK].

3 Select “View”, then press [OK].

To change TV Guide view

Press [GUIDE] to switch between “Landscape” view and “Portrait” view.

Page up/down

Press [CH ∧ ∨].

To view a programme list for another day

Press the green button (Previous) or the yellow button (Next).

To see programme information

Press [STATUS ⓘ].

To retrieve the programme data for the area where data have not been acquired

Select the area, then press [STATUS ⓘ].

- Some broadcasters may not send the programme data. You cannot retrieve the data from them.

To set a timer Recording using the TV Guide System

Refer to “Timer recording”. (⇨ 38)

To search the programmes

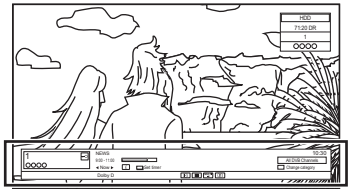
Refer to “To search the programmes”. (⇨ 38)

- If you make access to Rovi Guide via Network Service, you can use an additional TV Guide which can search programmes by keywords and can display the detailed information, etc. (current as of July, 2014). (⇨ 79)

Using channel information

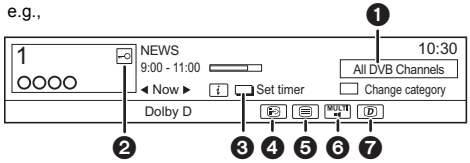
While watching a programme

Press [STATUS ⓘ].



Channel information appears.

e.g.,



❶ Current Category
❷ Encrypted broadcast
❸ Set timer (⇨ 40)
❹ Subtitle
❺ Teletext
❻ Multiple audio/Sub Channel
❼ Data service (Hybrid Broadcast Broadband TV) (⇨ 32)

To show detailed information

Press [STATUS ⓘ] again.

To hide the information screen

Press [EXIT ⊗].

To change Category

Press the blue button.

• To register your favourite channels

1 Press [OPTION].
2 Select “Digital TV Menu”, then press [OK].
3 Select “Favourites Edit”, then press [OK].
4 Refer to “Favourites Edit”. (⇨ 89, 91)

To switch between the current programme and the next programme

Press [◄, ►].

To switch to another channel

Press [▲, ▼], then press [OK].

Operations while watching broadcast

To show subtitle

When “ ” appears in channel information (⇨ left)

Press [STTL].

• Press again to hide subtitle.

To change subtitle language

1 Press [OPTION].
2 Select “Subtitle Language” in “Digital TV Menu”, then press [OK].
3 Select the desired language.
• Press [EXIT ⊗] to exit the screen.

• Some subtitle contents can be displayed using Teletext. (⇨ 32)

Switching audio

Press [AUDIO].

• Audio will switch according to the contents of the programme every time it is pressed.

Watching broadcasts

To use data service (Hybrid Broadcast Broadband TV)

You can enjoy the interactive data services for digital broadcasting.
To use Hybrid Broadcast Broadband TV application, perform network connection and settings. (⇨ 21, 26)

When notification message is displayed:
Follow the on-screen instructions.

When the Teletext is included in data service:

When [TEXT ☰] is pressed, the Teletext of data service will be displayed.

- Operation buttons: [▲, ▼, ◄, ►], [OK], number buttons or colour buttons, etc.
- Operations may vary depending on the broadcaster.
- On-screen instructions may not correspond to the remote control buttons.
- It may take some time to show the data service.
- Not all the data services are available depending on the broadcaster.
- Some functions of the data service may be deactivated during recording.

To show the Teletext

When " ☰ " appears in channel information (⇨ 31)

1 Press [TEXT ☰].
- When the Teletext of data service is displayed, press [TEXT ☰] again.

2 Use [▲, ▼, ◄, ►], number buttons or colour buttons, etc. according to on-screen instructions.

- You can change the display mode. (⇨ 97, Teletext)

Aspect

You can switch the screen mode.
Refer to "Switching the aspect ratio of the screen". (⇨ 107)

To select the contents in the broadcast

When a programme includes audio signals etc., you can select signals.

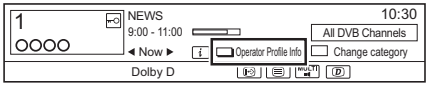
1 Press [OPTION].
2 Select "Digital TV Menu", then press [OK].
3 Select "Multi Audio" or "Sub Channel", then press [OK].
4 Select the item.

About Operator profile

Depending on your CAM, the channel list can be updated to the one recommended by the CAM.

To perform an update, operate following the instructions on the screen.

- If cancelled, the notification is instead displayed on the channel information (⇨ 31).
  e.g.,



  To execute channel list upgrade, press the red button.

- Performing an update will delete the existing channel list. To return to the original channel list, restart "Auto Setup" in "Basic Settings" menu. (⇨ 89, 92)
- The timer recording programmes may be cancelled. Please confirm a timer programme. (⇨ 41)

REWIND LIVE TV/PAUSE LIVE TV

This unit temporarily saves a live TV programme you are watching with this unit's tuner on HDD.

REWIND LIVE TV

You can rewind live TV programme to the point where temporary save has started (up to 1.5 hours).

- REWIND LIVE TV does not work when watching a programme via external input.

PAUSE LIVE TV

You can pause live TV programme and restart watching from the paused position.

1 While watching TV

REWIND LIVE TV:

Press [SLOW/SEARCH ◀◀] to rewind.

PAUSE LIVE TV:

Press [PAUSE ❚❚] to pause.

- The maximum amount of the temporary save is 1.5 hours.

2 When you want to resume:

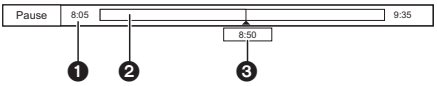
Press [PLAY/×1.3 ▶].

- You can perform search or Quick View, etc.
- If temporary save stops (⇨ right), playback will be performed by that point.

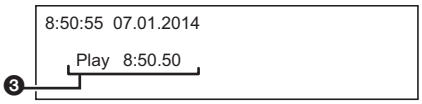
Display information

While pausing or rewinding a broadcast:

Press [STATUS ⓘ].

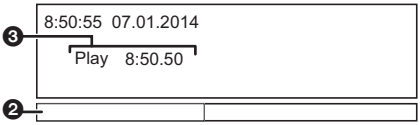


- Press [STATUS ⓘ] again.



While pausing a programme via external input:

Press [STATUS ⓘ] twice.



❶ The time that you can rewind the live programme.

❷ The amount of time temporarily saved on HDD.

❸ The time of the current playback position.

To stop REWIND LIVE TV or PAUSE LIVE TV

1 Press [STOP ■].

2 Select "Yes", then press [OK].

To hide the display information

Press [EXIT ⊗].

- The unit cannot rewind and play more than 1.5 hours prior to the current time.
- Temporary save stops in the following cases:
  - When switching to other channels or other screen
  - When recording of the watching programme is started
  - When two programmes simultaneous recording is started
  - When performing PAUSE LIVE TV or REWIND LIVE TV for more than 8 hours (This may vary depending on the HDD free space.)
- These functions do not work in the following cases:
  - When the clock is not set
  - When setting clock manually (Contents protected title (Retention limit) only) (⇨ 15)
  - While recording two programmes simultaneously
  - While copying
  - While watching a programme being recorded
  - When a radio programme is selected
  - While watching an encrypted programme
  - REWIND LIVE TV:
    When "REWIND LIVE TV" is set to "Off" (⇨ 94)
  - PAUSE LIVE TV:
    When a timer recording via external input is started while watching a programme via external input.
- PAUSE LIVE TV:
  You can operate this unit with the TV remote control by using VIERA Link (⇨ 84).
  Refer to the TV operating instructions.

Recording TV programmes

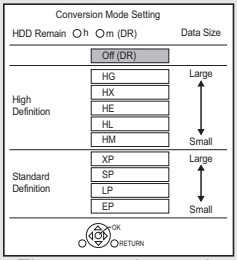
HDD

- This operation only records to built-in HDD.
- This unit can record two programmes being broadcasted at the same time.
- About CI Plus restriction (⇨ 15)
- Notes for recording of an encrypted broadcast (⇨ 36)

1 **Select the channel to record.**

2 **Press [REC MODE] and select the conversion mode, then press [OK].**

- This unit will record the programmes in DR mode once, and then automatically convert to the selected recording mode while this unit is in standby.
  - Recording mode (⇨ 8)



- The conversion mode set here is used as an initial value for the next recording.

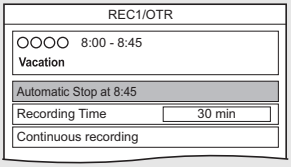
3 **Press [REC ●].**

Recording will start.

4 **Select “Automatic Stop”, then press [OK].**

- **One touch recording (OTR)**

  Recording stops automatically when the programme ends.



- You can also select “Recording Time” or “Continuous recording”. (⇨ below)

To set the recording time

1 Select “Recording Time” or “Continuous recording” in step 4 (⇨ above).

Recording Time:

You can set the length of recording time from 30 minutes to 4 hours.

- You can select the recording time with [◄, ►].

Continuous recording:

The recording is continued until you press [STOP ■].

2 Press [OK].

To convert the recording mode after recording in DR mode

Refer to “File Conversion”. (⇨ 56)

To confirm whether the conversion is completed

Refer to “To confirm whether the conversion is completed”. (⇨ 57)

To cancel a conversion

Refer to “To cancel a “During standby” conversion”. (⇨ 57)

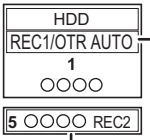
- One recording will terminate when simultaneous recording is being done and timer recording starts.
- When the programme recorded in DR mode is converted, teletext will not be recorded.
- Data service will not be recorded.
- Following contents or media cannot be played back while recording.
  - Xvid and MKV file
  - photo
  - USB HDD (For data files, ⇨ 9) and USB memory
- Copying cannot be performed while recording.
- When “Automatic Standby after OTR” is set to “On” (⇨ 101), this unit is turned to standby mode if this unit is not operated for approximately 5 minutes after completing “Automatic Stop” or “Recording Time”.
- When a programme is recorded in encrypted form, conversion will not start until decryption has finished. (⇨ 36)
- The title before conversion (the title recorded in DR mode) will be deleted once the conversion is completed.
- Conversion will take about the same time as the recorded duration.
- When the HDD does not have enough remaining space, conversion will not start.
- Conversion is stopped when this unit is turned on. Conversion will start from the beginning again once the unit is switched to standby mode.
- When converted, audio content and subtitle will be converted with the same settings as at the start of recording.

Operation during Recording

To check the recording programme

Press [STATUS ⓘ].

e.g., While recording two programmes simultaneously



Recording programme displayed on the TV

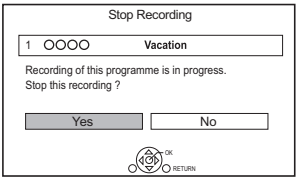
Recording programme not displayed on the TV

To stop recording

Press [STOP ■].

When recording one programme:

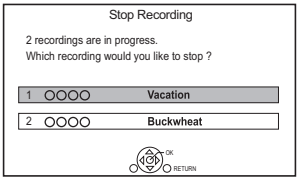
If the following screen appears



Select “Yes”, then press [OK].

When recording two programmes:

If the following screen appears



1 Select the programme, then press [OK].

2 Select “Yes”, then press [OK].

Recording TV programmes

To pause recording

After displaying the recording programme, press [PAUSE ❚❚].

- Press again to restart recording.
  (A title is not split into separate titles.)

- Timer recording programme cannot be paused.

To record two programmes simultaneously

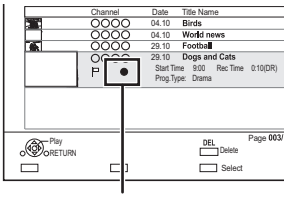
While recording, perform steps 1–4 on page 34.

- Channel or input can only be switched between the recording programmes.

Simultaneous rec and play

You can play the recording title from the beginning or the titles previously recorded to the HDD.

1 Press [DIRECT NAVIGATOR].



"●" is displayed on the recording programme.

2 Select the title, then press [OK].

Notes for recording of an encrypted broadcast

This unit allows you to record/view/play an encrypted programme by decryption using a supporting CI module.

Recording of encrypted broadcast

The recording of encrypted broadcasts differs according to the "Recording for Encrypted Channel" (⇨ 94) settings as follows.

	Supporting CI module is inserted	Supporting CI module is not inserted
Automatic	Record (Decrypted)※1	Record (Encrypted)
Decryption Recording	Record (Decrypted)	Recording impossible

※1 Depending on the specifications of the CI module, the broadcast may be recorded in the encrypted form.

2 encrypted programmes simultaneous recording/viewing/playing

Two programmes (e.g., "A" and "B") which need the same CI module for decryption will be recorded/viewed/played as follows:

When "Automatic" is selected

Programme	"A"	"B"
While recording programme "A", start recording programme "B".	Record (Decrypted)	Record (Encrypted)
While viewing/playing programme "A", start timer recording programme "B".	Viewing/ playing possible	Record (Encrypted)
While recording programme "A", view/play programme "B".	Record (Encrypted※2)	Viewing/ playing possible

※2 When you start viewing/playing programme "B", the decrypted recording of programme "A" switches to encrypted recording. You need to decrypt programme "A" to play it.

When “Decryption Recording” is selected

Programme	“A”	“B”
While recording programme “A”, start recording programme “B”.	Record (Decrypted)	Recording impossible
While viewing/playing programme “A”, start timer recording programme “B”.	Viewing/ playing impossible	Record (Decrypted)
While recording programme “A”, view/play programme “B”.	Record (Decrypted)	Viewing/ playing impossible

Encrypted titles

Programmes recorded in encrypted form ( ) have the following restrictions:

- The encrypted title can be played back, but it does not mean that it is decrypted and saved in the decrypted form.
- Depending on the programme, it may not be possible to play back/decrypt after recording.
- There are restrictions on the playback and editing of encrypted programmes.
- To copy an encrypted programme, decryption must be performed.

Decryption

Decryption is performed when the unit is turned off. It will take about the same time as the recorded duration.

“Copy” on the front panel display remains lighted during decryption.

It is also possible to decrypt manually

Refer to “File Decryption”. (⇨ 57)

- To decrypt, insert the CI module into the CI slot (⇨ 14). During decryption, do not remove the CI module from this unit.
- The title before decryption will be deleted once decryption is completed.
- When the HDD does not have enough remaining space, decryption will not start.
- This function is stopped when this unit is turned on. Decryption will start from the beginning again once the unit is turned off.
- When a decryption fails, the screen icon ( ) is changed to “ ” or “ (Grey)”.
  - : In this case, try to decrypt the title manually. (⇨ 57)
  - (Grey): When the title is copy protected (Copying is prohibited) by CI Plus CAM, operation on the title is not possible except for deletion. In this case, delete the title.

Timer recording

HDD

- You can enter up to 32 programmes within a month in advance. (Each daily or weekly programme is counted as one programme.)
- This operation only records to built-in HDD.
- This unit can record two programmes being broadcasted at the same time.
- About CI Plus restriction (⇨ 15)
- Notes for recording of an encrypted broadcast (⇨ 36)

Preparation

If you want to change the recording mode:
Press [REC MODE] and select the recording mode, then press [OK].

1 Press [GUIDE].
TV Guide screen appears.

e.g. **BCT845** **BST845**

2 Select the programme, then press the red button.
The timer icon "◴" (red) is displayed.
- If on-screen instructions are displayed, follow them.

To use TV Guide system

Refer to "Using TV Guide system". (⇨ 30)

To edit the timer recording on the TV Guide screen

1 Select the programme to edit, then press the red button.
2 Select "Timer Rec Edit", then press [OK].
3 Go to step 3 on page 39, "Manually programming timer recording".

To cancel a timer recording on the TV Guide screen

1 Select the programme to cancel, then press the red button.
2 Select "Timer Rec Cancel", then press [OK]. ("◴" disappears)

Operation during Recording

Refer to "Operation during Recording". (⇨ 35)

To search the programmes

1 On the TV Guide screen:
BCT845 **BST845**
Press [OPTION].

BCT745 **BCT740** **BST745** **BST740**
Press the blue button.

2 Select the item, then press [OK].
Keyword Search
Displays programmes including the input keyword.
- Refer to "Entering text". (⇨ 107)

Prog.Type Search
Displays programmes of the selected type.
- Select the programme type, then press [OK].

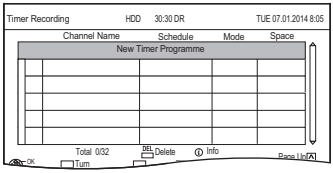
Category Selection
Displays programmes in the selected category.
- To return to the previous TV Guide list Select "All DVB Channels".

3 Select the programme, then press the red button for timer recording.

- Some broadcasters may not send programme information. When programme information is not displayed correctly, use manual timer recording. (⇨ 39)
- Category may not be assigned correctly depending on the programme information.
- The receipt of the TV Guide data via Set Top Box is not possible.
- When timer recording from the external equipment, use manual timer recording. (⇨ 39)
- You can set the start and finish time to make the timer recording work successfully. (⇨ 87, 94, Timer Record Start Buffer, Timer Record Stop Buffer)
- "Keyword Search", "Prog.Type Search" and "Category Selection" search the First 250 channels on "All DVB Channels".

Manually programming timer recording

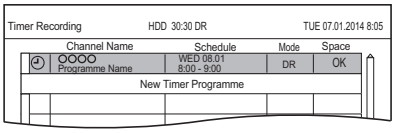
1 Press [PROG/CHECK].



2 Select “New Timer Programme”, then press [OK].

3 Select the items and change the items.
(⇨ right, Timer recording options)

4 Press [OK].
The timer programme is stored.



To confirm and edit the timer programme

Refer to “To confirm and edit a timer programme”. (⇨ 41)

Operation during Recording

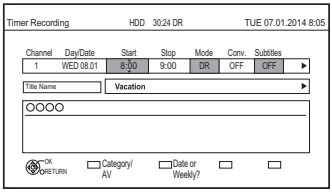
Refer to “Operation during Recording”. (⇨ 35)

- When recording from the external equipment, “Mode” (recording mode) is XP, SP, LP, EP or FR.

Timer recording options

Select the items and change the items.

e.g.,



Channel

- You can select Category/AV with the red button.

Day/Date

- You can select “Date” or “Weekly” by pressing the green button.
  - **Auto Renewal Recording**
    (Only daily/weekly timer recording)
    The unit will record the new programme over the old one.
    Press the yellow button.
    “Renew : ON” is displayed.

Start/Stop

- Press and hold [▲, ▼] to alter in 15-minute increments.

Mode/Conv.

Refer to step 2. (⇨ 34)

Subtitles

You can choose whether or not to record the subtitle at conversion.

(Only when item other than “OFF” is selected in “Conv.”)

Title Name

1 Select “Title Name”, then press [OK].
2 Refer to “Entering text”. (⇨ 107)

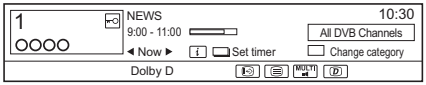
Timer recording

Timer recording from channel information

You can make timer recording of the current or next programme.

1 While watching a programme
Press [STATUS ⓘ].

e.g.,



2 Display the channel information of a programme to record.
- Switch the programme with [◄, ►].
- Switch the channel with [▲, ▼].

3 Press the yellow button.

4 Go to step 3 on page 39, “Manually programming timer recording”.

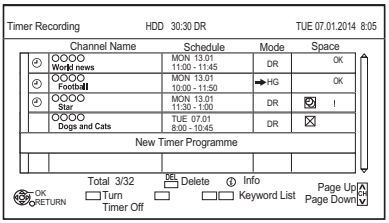
Notes on timer recording

- When the programme recorded in DR mode is converted, the audio content and subtitle language will be selected according to the following settings:
  - “Multi Audio” of “Preferred Language” (⇨ 93)
  - “Subtitles” of “Preferred Language” (⇨ 93)
  - Audio for HG / HX / HE / HL / HM Recording (⇨ 97)
- When the programme recorded in DR mode is converted, teletext will not be recorded.
- Data service will not be recorded.
- (Only when recording broadcast in other than DR mode)
  This unit will record in the DR mode once, and then convert to the selected mode automatically during standby. If the title has not been decrypted, conversion will start after decryption.
- Even if you switch the unit to standby mode during the timer recording, the recording is continued.
- When you programme successive timer recordings to start, about last 1 minute of earlier programme will not be recorded.
- Timer recording will not start while:
  - copying a title in high speed mode [with finalising or creating Top Menu (+RW)]
  - copying a title in normal speed mode
  - converting a title in “File Conversion” (Only when “Now” is selected)
  - copying HD Video (AVCHD) from USB device or SD card
  - copying photos/music
  - formatting
  - finalising/creating Top Menu
- When “Pure Sound mode” is activated, timer recording does not start during playback of BD-Video, DVD-Video or music CD. (⇨ 94)

To confirm and edit a timer programme

1 Press [PROG/CHECK].

e.g., **BCT845** **BST845**



2 Select the programme, then perform the operations.

To deactivate a timer programme

Press the red button.

- The timer icon "⏲" will change from red to grey.
- Press the red button again to activate timer recording standby. (The timer icon "⏲" will change to red.)

To delete a timer programme

Press [DEL].

To edit a timer programme

1 Press [OK].

2 Change the timer recording options.
- Refer to "Timer recording options". (⇨ 39)

3 Press [OK].

To show programme information

Press [STATUS ⓘ].

To exit the timer recording list

Press [EXIT ⊗].

Screen icons

⏲	Red: Timer recording standby is activated. Grey: Timer recording standby is deactivated.
●	Currently recording programme
	A part or all of the programme will not be recorded since the programme is overlapping.
	The HDD is full.
	Copy-protected programme It was not recorded.
☒	The recording of the programme was not completed because of some reason.
	Auto Renewal Recording is set (⇨ 39).
	Displayed if timer recording of two encrypted programmes is overlapping. (When "Recording for Encrypted Channel" is set to "Decryption Recording" only) A part or all of the programme will not be recorded since the encrypted programme is overlapping.
OK	Displayed if the recording can fit in the remaining space
--> (Date)	Daily or weekly timer programme is set.
!	It may not be possible to record because: - there is not enough space left. - the number of possible titles has reached its maximum. (⇨ 120) - programmes are deactivated, etc.

BCT845 **BST845**

- Programmes to be recorded with Keyword recording (⇨ 42) are not displayed.

Keyword Recording

BCT845 BST845

HDD

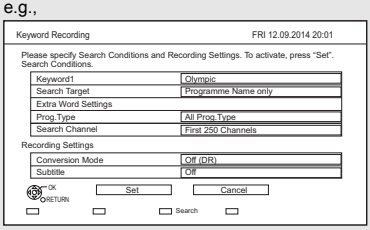
The unit can find programmes that include specified keywords from programme names and programme information on TV Guide, and record the programmes automatically.

- This operation only records to built-in HDD.
- This unit can record two programmes being broadcasted at the same time.
- Restrictions on CI Plus and encrypted programmes that apply when recording programmes also apply to this function. (⇨ 15, 36)
- Notes on timer recording (⇨ 40)

1 On the TV Guide screen:
Select the programme for keyword recording and press the blue button.

2 Select the items and change the items if necessary.
- Refer to “Keyword Recording conditions”. (⇨ right)

e.g.,



3 Select “Set”, then press [OK].

4 Press [OK].
The Keyword Recording icon “◴” (blue) is displayed on the TV Guide screen.

- Programmes that are set to be recorded automatically with Keyword Recording are not displayed on the Timer Recording confirmation screen. (⇨ 41). (⇨ right, “To display the list of programmes found with the set keyword”)
- When a search brings up too many programmes, we recommend revising the search settings.
- On the TV Guide screen, up to 128 programmes are displayed with the Keyword Recording icon “◴” (blue).

Keyword Recording conditions

Search Conditions:

Keyword 1-16

Input the keyword to be registered.
- Refer to “Entering text”. (⇨ 107)
- Default keyword is the programme title selected on the TV Guide screen.
  If the programme title includes its episode number, etc., delete the number before registering the title.

Search Target

Select the search target.

Extra Word Settings

1 Add up to two keywords and two excluded words to refine search conditions.
2 Select “Set”, then press [OK].

Prog.Type

Select the programme type.

Search Channel

The Keyword Recording function can search the First 250 channels listed on “All DVB Channels” or the First 50 channels registered for “Favourites1”.
- When setting “First 50 Favourites1” as a search target, register the channels you want to search with Keyword Recording to First 50 channels of “Favourites1” in advance. (⇨ 90, 92)

Recording Settings:

Conversion Mode

Refer to step 2 on page 34, “Recording TV programmes”.

Subtitle

You can choose whether or not to record the subtitle at conversion.
(Only when item other than “Off(DR)” is selected in “Conversion Mode”)

To display the list of programmes found with the set keyword

Press the yellow button in “Keyword Recording” screen.

SAT 18.10	Schedule	Programme Name
2 ABC1	7:00-7:30	Olympic opening ceremony
23 ABC2	7:00-8:00	Olympic opening ceremony
22 ABC1	9:00-11:30	◴ Olympic Soccer
2 ABC2/4	7:00-7:30	Olympic Judo
22 ABC1	9:00-10:30	Olympic Boxing

◴ Blue: Recording has already been set with a different Keyword.

◴ Red: Timer recording standby is activated.

Priority order of Keyword Recording

Recording takes place in the following order of priority:

1 A programme that is already being recorded
2 Timer Recording
3 A programme with a smaller keyword number (1 to 16)
4 A programme that starts first

Keyword Recording may not work in some cases. To avoid recording failure, we recommend using Timer Recording instead of Keyword Recording.

Changing the recording method

Select the programme marked "◷" (Blue), then press the red button on the Keyword Recording status screen or TV Guide screen. (⇨ 42)

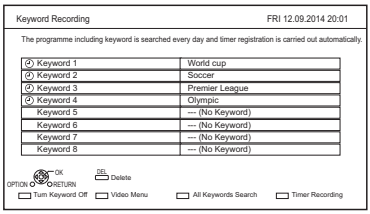
• If you press the red button selecting the programme marked "◷" (Red), "Timer Rec Edit" (⇨ 39) or "Timer Rec Cancel" is available.

• Programmes set for timer recordings are not treated as Keyword Recording programmes.

Displaying the Keyword List

You can also set keywords from [FUNCTION MENU].

1 Press [FUNCTION MENU].
2 Select "Keyword Recording", then press [OK].



To add/edit the Keyword

Select the Keyword and press [OK], then make required settings.

• Refer to "Keyword Recording" (⇨ 42)

To deactivate the Keyword Recording

Select the Keyword, then press the red button.

• Press again to return back to the Keyword Recording standby.

To search programmes matched with any of the registered keywords

Press the yellow button.

To play programmes recorded with Keyword Recording

Press the green button.

• Refer to "Playing Keyword Recording titles" (⇨ 47)

To delete the registered Keyword

1 Select the Keyword, then press [DEL].
2 Select "Yes", then press [OK].

To change the recording priority of keywords

• Refer to "Priority order of Keyword Recording" (⇨ left)

1 Press [OPTION].
2 Select "Change Priority", then press [OK].
3 Press [▲, ▼] to shift the position, then press [OK].

Automatic deletion of Keyword Recording

By default, the unit automatically deletes titles recorded with Keyword Recording after 10 days.

Perform the following not to delete them as necessary. (⇨ 47)

- Protect titles.
- Change Delete Settings.
- Remove titles from "Keyword Record".
- Copy titles before deleting them.

Playing titles on the HDD

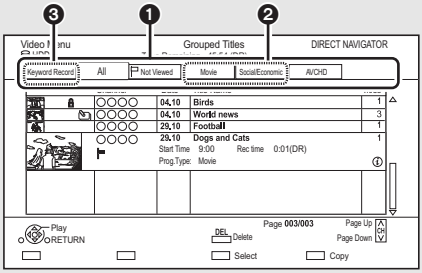
HDD USB-HDD ※

※ “For recorded titles (⇨ 9)” only

1 **Press [FUNCTION MENU].**

2 **Select “Video” in “Contents on HDD”, then press [OK].**

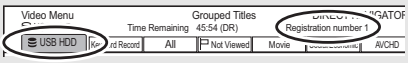
e.g., BCT845 BST845



❶ Tab (⇨ 45)
❷ Programme type
❸ BCT845 BST845 Keyword Recording
Refer to “Playing Keyword Recording titles” (⇨ 47)

- USB HDD When connecting registered USB HDD, “USB HDD” tab and registration number appears.
  Select “USB HDD” tab.

e.g., BCT845 BST845



3 **Select the title, then press [OK].**
Playback will start.

Resume play function

If the following screen appears, select the point to start playback.

DIRECT NAVIGATOR screen

Screen icons

●	Currently recording programme
🔒	Protected title
	Title was not recorded due to recording protection
×	Title cannot be played (When data is damaged etc.)
	Title is copy protected (One generation copy is permitted)
L ※	Title requires a CAM with a playback licence to play back. • The number of times the title can be played back may also be limited.
※	Title cannot be played back when a certain time has elapsed after the recording. The icon turns grey after the playback period has passed. • Playback period limit can be checked in the information of that title. (⇨ 45, Showing Information)
∞ ※	Title is copy restricted.
L ※	Title requires a CAM with a playback licence to play back. If a certain time has elapsed after the recording, the title cannot be played back. • The number of times the title can be played back may also be limited.
	Encrypted title
	Title has failed to be decrypted • Press [STATUS ⓘ] to show the reason of the failure.
(Grey)	Title cannot be played back, edited (except deleting) or copied. Delete the title. (⇨ 54)
	Grouped titles
	Title has not yet been played

NTSC PAL	Title is recorded using a different encoding system from that of the unit. Change the “TV System” (⇨ 87, 98).
	Radio programme
3D	3D contents • This icon will not display even with 3D programmes when a broadcast programme is recorded.
1080 50p	Recorded in 1080/50p contents
1080 60p	Recorded in 1080/60p contents
	Recording did not complete as the timer recording has started.
CAM G	Title has a rating level set by the CAM.
BCT845 **BST845**	
	Keyword recording title which has not yet been played
	Grouped Keyword recording titles
	Keyword recording title which has already been played
	Notification icon for a new Keyword Recording
BCT845 **BCT745** **BCT740**	
G	Title is restricted by Child Lock List or Parental Rating (⇨ 91).

※ Title cannot be edited (except deleting) or copied.

Tab

Titles will be categorised automatically.
You can quickly find the recorded titles by selecting the tab.

To select the tab

Press [◄, ►].

To change the displayed programme type tab

1 Select the programme type, then press the green button.
2 Select the item, then press [OK].

Showing Information

Select the title, then press [STATUS ⓘ].

Switching the appearance

1 Press [OPTION].
2 Select “Grouped Titles” or “All Titles”, then press [OK].

Grouped Titles:

• Two or more titles recorded in the daily/weekly timer recording mode are bundled and displayed as one item.

BCT845 **BST845**

• Two or more Keyword recording titles recorded from the same Keyword.

All Titles:

Displays all titles.

Playing back grouped titles

1 On the Grouped Titles screen:
Select the item marked with or .
(: **BCT845** **BST845** only)
2 **When playing all titles:**
Press [PLAY/×1.3 ►].

• This function cannot be used if the group includes any encrypted title ( ).

When playing the individual title:

Press [OK] and select the title, then press [OK].

Playing titles on the HDD

Editing the grouped titles

1 Select the title or the group, then press the yellow button.
- A check mark is displayed. Repeat this step.
  - Press the yellow button again to cancel.
- If you perform “Remove”, select the title in the group.

2 Press [OPTION].

3 Select the item, then press [OK].

Create Group:

Selected titles are bundled to form a group.
Select “Create”, then press [OK].

Release Grouping:

All the titles in the group are released.
Select “Release”, then press [OK].

Remove:

Selected titles are removed from the group.
Select “Remove”, then press [OK].

Changing the group name

1 Select the group, then press [OPTION].

2 Select “Edit”, then press [OK].

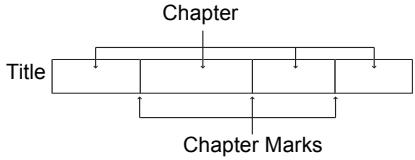
3 Select “Enter Title Name”, then press [OK].

4 Refer to “Entering text”. (⇨ 107)

Playback from Chapter View

Regarding chapters

You can divide a title into multiple chapters. Each section between the division points (Chapter Marks) becomes a chapter.



- **Chapter Creation**

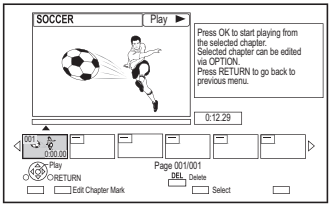
  This unit can create chapters automatically while recording broadcasting. (⇨ 95)

- If the title is recorded in the encrypted form, the chapter will be created only after the title is decrypted.

1 Select the title, then press [OPTION].

2 Select “Chapter View”, then press [OK].

e.g., HDD



3 Select the chapter, then press [OK].

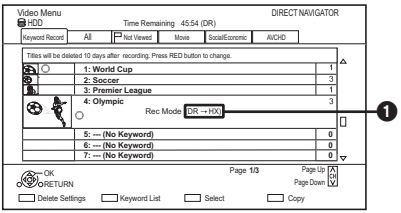
To edit the chapter in Chapter View

Refer to “Editing chapters”. (⇨ 58)

Playing Keyword Recording titles

BCT845 **BST845**

1 Select “Keyword Record” tab.



❶ Recording mode for conversion (⇨ 56)

2 Select the Keyword, then Press [OK].

3 Select the title, then press [OK].

To play back all Keyword Recording titles recorded with the selected Keyword

Select the Keyword, then press [PLAY/×1.3 ▶] in step 2.

To change automatic delete settings

1 Press the red button in step 2. (⇨ above)

2 Select the item, then press [OK].

- Select “No Automatic Deletion” not to delete titles automatically.

To display Keyword List

Press the green button in step 2. (⇨ left)

- Refer to “Displaying the Keyword List”. (⇨ 43)

To protect Keyword Recording titles

Protection setting prevents the Keyword Recording title from automatic deletion.

1 Select the title, then press the red button in step 3. (⇨ left)

2 Select “Set up Protection”, then press [OK].

- To release the protection
  Select “Cancel Protection”, then press [OK].

To remove Keyword Recording titles from “Keyword Record”

Removed Keyword Recording titles are not under “Keyword Record”.

- Keyword Recording titles removed from “Keyword Record” will be treated as normal titles.

1 Select the title, then press [OPTION] in step 3. (⇨ left)

2 Select “Remove from Keyword Record”, then press [OK].

3 Select “Remove”, then press [OK].

To copy Keyword Recording titles

You can copy Keyword Recording titles on the disc or the USB HDD.

1 Select the title, then press the yellow button in step 3. (⇨ left)

or

Select the Keyword, then press the yellow button in step 2. (⇨ left)

A check mark is displayed. Repeat this step.

- Press the yellow button again to cancel.

2 Perform steps 5-9 on page 59, “Copying titles”.

Playing titles on the media

USB-HDD※ BD-Video DVD-Video BD DVD
CD SD USB

※ “For data files (⇨ 9)” only

1 **Insert the media.**
Depending on the type of the media, play starts from the specified position, or the screen appears.
- AVCHD: If the menu screen is not displayed
  Press [PLAY/×1.3 ►].

2 When the DIRECT NAVIGATOR screen or menu screen etc., appears:
Select the item or title, then press [OK].
- Repeat this step if necessary.

Playback will start.

To play back the playlist created on other equipment

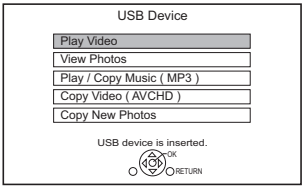
1 Press [FUNCTION MENU].
2 Select “Disc” in “Media”, then press [OK].
3 Select “Playlists”, then press [OK].
4 Select the playlist, then press [OK].

- **BD-V** You cannot play back while recording from external equipment. Also, playback stops when the timer recording starts from external equipment.
- Some files may not be played back, depending on the video resolution and frame rate condition.

Menu screen

Selecting screen for each operation is displayed when the media is inserted, and you can access the operation screen easily.

e.g., **USB**



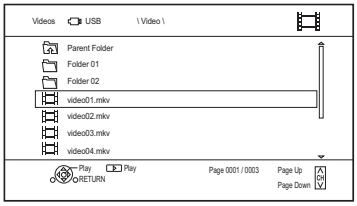
- Display items differ depending on what is recorded in each media.

If the menu screen is not displayed, display it by performing the following operation.

1 While stopped
Press [FUNCTION MENU].
2 Select “Media”, then press [OK].
3 Select the media, then press [OK].

Video list screen

e.g.,

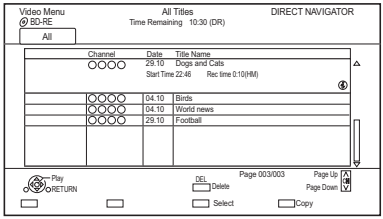


Screen icons:

	Folder
	Titles
	Move to the parent folder

DIRECT NAVIGATOR screen

e.g.,



Showing Information

Select the title, then press [STATUS ⓘ].

Playback from Chapter View

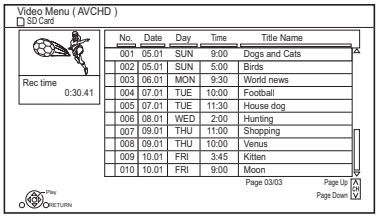
1 Select the title, then press [OPTION].
2 Select “Chapter View”, then press [OK].
3 Select the chapter, then press [OK].

• Regarding chapters
Refer to “Regarding chapters”. (⇨ 46)

Video Menu (AVCHD) screen

SD

e.g.,



Showing Information

1 Select the title, then press [OPTION].
2 Select “Information”, then press [OK].

About screen icons

Refer to “Screen icons”. (⇨ 44)

Notes for BD-Live discs

BD-V

BD-Live allows you to enjoy more functions such as subtitles, exclusive images and online games by connecting this unit to the Internet.

Preparation

1 Perform network connection and settings. (⇨ 21, 26)
2 Insert a disc.

For the playback method, refer to the instructions for the disc.

Delete BD-Video data

If you no longer need BD-Live data recorded on the built-in HDD, you can delete data with the following operation.

1 Press [FUNCTION MENU].
2 Select “BD-Video Data Management” in “Setup”, then press [OK].
3 Select “Delete BD-Video data”, then press [OK].
4 Select “Yes”, then press [OK].
5 Select “Start”, then press [OK].
6 Press [OK].

- The usable functions and the operating method may vary with each disc, please refer to the instructions on the disc.
- You can restrict Internet access when BD-Live functions are used (⇨ 87, 93, BD-Live).
- When “Pure Sound mode” is set to “On”, this unit cannot use BD-Live functions. (⇨ 94)

Operation during play

HDD USB-HDD BD-Video DVD-Video BD DVD CD SD USB

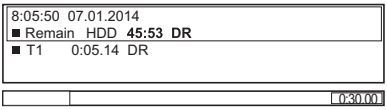
- Depending on the media and the type of file, some operations may not be possible.
- Depending on the media, it may take time for the menu screen, pictures, sound, etc. to start.
- Discs continue to rotate while menus are displayed. Press [STOP ■] when you have finished playback to protect the unit's motor, your TV screen, etc.

General operations

Status messages

Press [STATUS ⓘ] twice.

e.g.,



Stop

Press [STOP ■].

Resume play function

Press [PLAY/×1.3 ►] to restart from the stopped position.

- **Discs:** Only previous stopped position is memorized. The position may be cleared if the tray is opened or the unit is switched to standby mode.

Quick View

Press and hold [PLAY/×1.3 ►].

- Press again to return to normal speed.

- **Xvid, MKV, MP4 and MPEG2:** Quick View is not effective.
- Quick View is not effective when playing back the DVD-RW disc.
- Quick View may not work when recording in XP or FR mode.
- Quick View cannot be used on encrypted titles ( ).

Search

Press [SLOW/SEARCH ◄◄] or [SLOW/SEARCH ►►].

- Press [PLAY/×1.3 ►] to restart play.

- The speed increases up to 5 steps. (+R +RW: Up to 3 steps)
- **Xvid, MKV, MP4 and MPEG2:** Audio is not heard during all levels search.

Pause

Press [PAUSE ❚❚].

- Press [PLAY/×1.3 ►] to restart play.

Slow-motion

While paused, press [SLOW/SEARCH ◄◄] or [SLOW/SEARCH ►►].

- Press [PLAY/×1.3 ►] to restart play.

- The speed increases up to 5 steps.
- **Xvid, MKV, MP4 and MPEG2:** Slow-motion is not effective.
- BD-V, **AVCHD (**DVD-R SD**):** Forward direction [SLOW/SEARCH ►►] only.
- Slow-motion cannot be used on encrypted titles ( ).

Frame-by-frame

While paused, press [◀] (◀❚❚) or [▶] (❚❚▶).

- Each press shows the next frame.
- Press and hold to change in succession forward or backward.
- Press [PLAY/×1.3 ▶] to restart play.

- **Xvid, MKV, MP4 and MPEG2:** Frame-by-frame is not effective.
- BD-V, **AVCHD** (DVD-R SD)**:** Forward direction [▶] (❚❚▶) only.
- Frame-by-frame cannot be used on encrypted titles ( ).

Manual Skip

Skip forward 1 minute:

Press [MANUAL SKIP +60s].

Skip backward 10 seconds:

Press [MANUAL SKIP -10s].

- **Xvid and MKV:** Manual Skip is not effective.

Skipping the specified time

1 Press [TIME SLIP].
2 Select the time with [▲, ▼].
  - Press and hold [▲, ▼] to change the time by 10-minute.
3 Press [OK].
  - Play skips the specified time.

- BD-V DVD-V**, Xvid, MKV, AVCHD, MP4 and MPEG2:** [TIME SLIP] is not effective.

To display menu

BD-V DVD-V

1 Press [OPTION].
2 Select “Playback Menu”, then press [OK].
3 Select “Top Menu”, “Pop-up Menu” or “Menu”, then press [OK].

Skipping the title or chapter

Press [SKIP ⏮] or [SKIP ⏭].

- HDD USB HDD (For recorded titles, ⇨ 9)**:** It will not skip the title. But the title in the grouped titles will be skipped. (⇨ 45)
- [SKIP ⏭] is not effective for encrypted titles ( ).

To create Chapter Marks

HDD USB HDD (For recorded titles, ⇨ 9)
BD-RE BD-R RAM

During the playback or pause
Press [CHAPTER].

To delete the Chapter Mark

HDD USB HDD (For recorded titles, ⇨ 9)
BD-RE BD-R RAM

1 While paused
Press [SKIP ⏮] or [SKIP ⏭] and skip to the location you want to delete.
2 Press [CHAPTER].
3 Select “Yes”, then press [OK].

Operation during play

Changing audio

Press [AUDIO].

- It will switch depending on the contents recorded every time it is pressed.

Switching subtitles

HDD USB HDD (For recorded titles, ⇨ 9) BD-RE BD-R:

1 Press [STTL].

2 Press [OK].

3 Select “On” or “Off”, then press [OK].

- If you want to switch the subtitle language, select it in the Basic Operation menu (⇨ 85).

BD-V DVD-V, Xvid and MKV:

Display with “Subtitle Settings” in the Basic Operation menu (⇨ 85).

- **Xvid and MKV:** If the subtitles text are not displayed correctly, try changing the language settings (⇨ 94, Subtitle Text).

Displaying the Teletext

HDD USB HDD (For recorded titles, ⇨ 9) BD-RE BD-R:

Press [TEXT].

- Teletext display mode is TOP (FLOF) only.
- Some functions may not work.
- Teletext cannot be displayed when the subtitles are set to ON.

Aspect

You can switch the screen mode.

Refer to “Switching the aspect ratio of the screen”. (⇨ 107)

3D video playback

Preparation

Connect 3D compatible TV to this unit. (⇨ 16, 17)

- Perform the necessary preparations for the TV.

Play back following the instructions displayed on the screen.

Preparatory 3D settings

Perform the following settings as necessary.

3D BD-Video Playback

It is also possible to play back 3D discs in 2D (conventional video). (⇨ 87, 93)

3D Type

If 3D video cannot be played back in 3D, you may be able to play it in 3D by changing the setting. (⇨ 87, 98)

3D AVCHD Output

If 2D AVCHD video is recognised as 3D video and cannot be played back correctly, you may be able to play it by changing the setting. (⇨ 87, 98)

3D Playback Message

Hide the 3D viewing warning screen. (⇨ 87, 98)

3D settings during playback

Change this setting when the screen is not correctly displayed for 3D compatible programmes.

1 Press [OPTION].
2 Select “Playback Settings” in “Playback Menu”, then press [OK].
3 Select “3D Settings”, then press [OK].
4 Select the item, then press [OK].

Signal Format

- Original:
  Keep original picture format.
- Side by side:
  3D picture format comprising of left and right screens.
- 2D to 3D:
  Converts 2D pictures to 3D effect while playing.

3D Picture Mode

- Normal:
  Normal 3D effects.
- Soft:
  Soft 3D effects.
  • This function cannot be enabled when “Signal Format” is set to “2D to 3D”.
- Manual:
  3D effects set manually (⇨ below)

Manual Settings

(To change the setting, set “3D Picture Mode” to “Manual”.)

Distance
Set the amount of depth perception.

Screen Type
Selects how the screen appears during 3D playback (flat or round).

Frame Width
Set the amount of feathering at the edge of screen.

Frame Colour
Set the colour of feathering at the edge of screen.

Graphic Display Level

Adjust the 3D position for the playback menu or message screen etc. (⇨ 86)

- Depending on the contents, displayed items are different.
- This unit only guarantees the playback of the Frame Sequential and the Side-by-Side (Half) programme types.
- Please refrain from viewing 3D images if you do not feel well or are experiencing visual fatigue.
  In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images, discontinue use and rest your eyes.
- Depending on the connected TV, the video being played back might switch to 2D video due to changes in resolution etc. Check the 3D setting on the TV.
- 3D video might not output the way it is set in “HDMI Video Format” (⇨ 98) and “24p Output” (⇨ 98).
- It may display as Side-by-Side when playback of the 3D video is started.

Deleting/Editing recorded titles

Once deleted, divided or partially deleted, recorded content cannot be restored to its original state. Make certain before proceeding.

HDD USB HDD※ BD DVD

※ “For recorded titles (⇨ 9)” only

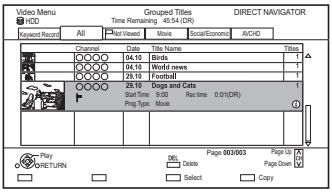
- If the disc is protected, release the protection. (⇨ 105, Disc Protection)
- Depending on the media and the type of file, some operations may not be possible.

BCT845 **BCT745** **BCT740**

- PIN is required to edit the titles with Ⓖ in some functions. (⇨ 45)

Deleting

1 On the DIRECT NAVIGATOR screen: Select the title.
e.g. **BCT845** **BST845**

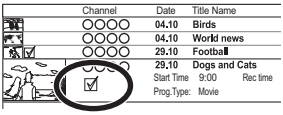


2 Press [DEL].

3 Select “Delete”, then press [OK].

Multiple deleting

Select the title, then press the yellow button in step 1.



A check mark is displayed. Repeat this step.

- Press the yellow button again to cancel.

Deleting during play

1 Press [DEL] while playing.

2 Select “Delete”, then press [OK].

Available disc space after deleting

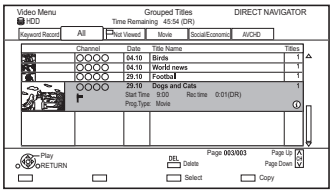
- **HDD** **USB HDD** **BD-RE** **RAM**
  The space deleted becomes available for recording.
- **BD-R** **DVD-R** **+R**
  Available space does not increase even after the contents are deleted.
- **DVD-RW** **+RW**
  Available recording space increases only when the last recorded title is deleted.

- Even after deletion is completed, it may take time until the updated available space is displayed.

Editing

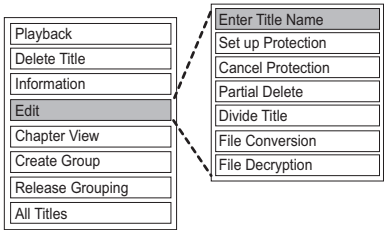
- If the title is contents protected, you may not perform editing other than deleting. (⇨ 15)

1 On the DIRECT NAVIGATOR screen: Select the title.
e.g. **BCT845** **BST845**



2 Press [OPTION].

3 Select the item, then press [OK].
e.g.,



- “Edit” has several functions.

Multiple editing

Select the title, then press the yellow button in step 1.

A check mark is displayed. Repeat this step.

• Press the yellow button again to cancel.

Deleting

1 Select “Delete Title”, then press [OK].

2 Select “Delete”, then press [OK].

Entering title name

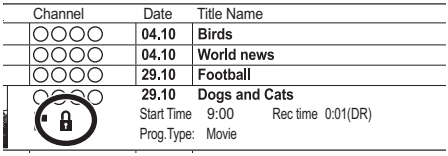
1 Select “Enter Title Name” in “Edit”, then press [OK].

2 Refer to “Entering text”. (⇨ 107)

Setting protection

HDD USB HDD BD-RE BD-R RAM +R +RW

Protection setting prevents the title from accidental deletion.



1 Select “Set up Protection” or “Cancel Protection” in “Edit”, then press [OK].

2 Select “Yes”, then press [OK].

appears when setting the protection.

• This function cannot be used on encrypted titles ( ).

Partial deleting

HDD USB HDD BD-RE BD-R RAM

1 Select “Partial Delete” in “Edit”, then press [OK].

2 Press [OK] at the start point and end point to delete.

• You can find the desired point by using play, search, etc. (⇨ 50)

3 Select “Continue”, then press [OK].

• Select “Next”, then press [OK] to delete other sections. Up to 20 sections can be set. (⇨ go to step 2)

4 Select “Delete”, then press [OK].

• Chapter Mark is generated in the scene that was partially deleted.

5 Press [RETURN ⮌].

• This function cannot be used on encrypted titles ( ).

Dividing title

HDD USB HDD BD-RE BD-R RAM

1 Select “Divide Title” in “Edit”, then press [OK].

2 Press [OK] at the point to divide the title.

• You can find the desired point by using play, search, etc. (⇨ 50)

3 Select “Continue”, then press [OK].

4 Select “Divide”, then press [OK].

To confirm the division point

After performing step 2.

Select “Preview”, then press [OK].

• The unit plays 10 seconds before and after the division point.

To change the division point

After performing step 2.

Restart play and select “Divide”, then press [OK] at the division point.

• HDD USB HDD Divided titles will become a group of titles.

• This function cannot be used on encrypted titles ( ).

Deleting/Editing recorded titles

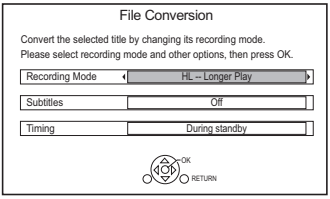
File Conversion

HDD USB HDD

File Conversion is a function to convert the recording mode of the title in DR mode and AVCHD contents. The size of the converted title will be small regularly. It will take about the same time as the recorded duration.

1 Select “File Conversion” in “Edit”, then press [OK].

e.g.,



2 Set the conversion options, then press [OK].

Recording Mode (⇨ 8):

- USB HDD You cannot select XP, SP, LP and EP mode.

Subtitles:

- **Automatic**
  Subtitles will be recorded if they are included in the title, and will not be recorded if they are not included.
- **Off**
  Subtitle will not be recorded.

Timing:

- **Now**
  Conversion begins immediately after step 4.
  - Timer recording will not be performed during conversion.
  - If an encrypted title ( ) is included, “Now” cannot be selected.
- **During standby**
  Conversion will be performed after the unit is switched to standby mode.

3 Select the item, then press [OK].

Convert & Delete:

The original title will be deleted to save HDD capacity after conversion.

Convert Only:

The original title remains after conversion.

- The original title will be deleted after File Conversion, if the selected title is indicated with . (⇨ 15)

4 **“Now” conversion:**

Select “Start”, then press [OK].

“During standby” conversion:

Press [OK].

- Conversion will be performed after the unit is switched to standby mode.

  “Copy” or “Conversion” on the front panel display remains lighted during conversion.
  - If the title is encrypted ( ), conversion will start after decryption.

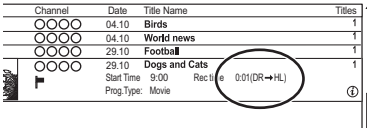
To cancel a “Now” conversion

Press and hold [RETURN ⊜] for more than 3 seconds.

To confirm whether the conversion is completed

Press [DIRECT NAVIGATOR].

e.g.,



When "○○ → ○○ (Recording mode for conversion)" is displayed, the conversion has not finished.

To cancel a "During standby" conversion

After performing steps 1–3 (⇨ 54, Editing)

1 Select "File Conversion" in "Edit", then press [OK].

2 Select "Yes", then press [OK].

- To use "File Conversion", the HDD needs enough storage capacity.
- The size of converted title might increase depending on the title.
- Teletext will not be recorded.
- File Conversion is stopped when this unit is turned on during performing "During standby" conversion. Conversion will start from the beginning again once the unit is switched to standby mode.
- When converted, the audio content and subtitle language will be selected according to the following settings:
  - "Multi Audio" of "Preferred Language" (⇨ 93)
  - "Subtitles" of "Preferred Language" (⇨ 93)
  - Audio for HG / HX / HE / HL / HM Recording (⇨ 97)
- When converted, 3D information may not be retained.
- In titles with the Auto Renewal Recording function (⇨ 39) set, a programme may be unintentionally converted while in "During standby".

File Decryption

HDD

Encrypted titles ( ) can be decrypted manually.

1 Select "File Decryption" in "Edit", then press [OK].

2 Select whether to delete the original title or not, then press [OK].

- **Yes**
  The original title will be deleted to save HDD capacity after decryption.
- **No**
  The original title remains after decryption.

3 Select "Start", then press [OK].
Decryption starts.
"Decrypting" appears during decryption.

- When a title that is copy protected (One generation copy is permitted) is selected, the original title will be deleted after decryption. (⇨ 15)
- When a decryption fails, the screen icon ( ) is changed to " ".

To cancel the decryption

Press and hold [RETURN ⮌] for more than 3 seconds.

- For decryption, the CI module that supports the programme is necessary.
- Depending on the programme, playback/decryption may not be possible.
- During decryption, do not remove the CI module from this unit.

Deleting/Editing recorded titles

Editing chapters

HDD USB HDD BD-RE BD-R RAM

1 Select “Chapter View”, then press [OK].

2 Perform the editing operations.

Edit Chapter Mark:

Select the point where you want to start a new chapter while viewing the title.

1 Press the green button.

2 Press [OK] at the point you want to divide.

• Repeat this step.

3 Press [RETURN ⮌] to go to Chapter View screen.

To delete the chapter:

1 Select the chapter, then press [DEL].

Multiple editing

Select the chapter, then press the yellow button.

A check mark is displayed. Repeat this step.

• Press the yellow button again to cancel.

2 Select “Delete”, then press [OK].

To combine chapters (Delete chapter mark):

1 Select the chapter, then press [OPTION].

2 Select “Combine Chapters”, then press [OK].

3 Select “Combine”, then press [OK].

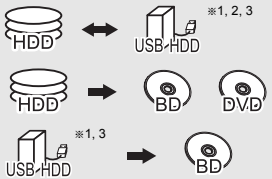
The selected chapter is combined to the next chapter.

Playback from Chapter View

Refer to “Playback from Chapter View”. (⇨ 46)

- The maximum number of chapters: (Depends on the state of recording.)
  HDD USB HDD: Approx. 1000 per title
  BD-RE BD-R RAM: Approx. 1000 per disc
- HDD USB HDD When the title has the maximum number of chapters, you cannot perform the Resume play function (⇨ 44) with the title.
- This function cannot be used on encrypted titles ( ).

Copying titles



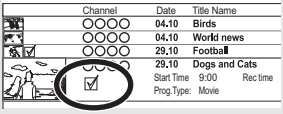
※1 “For recorded titles (⇨ 9)” only
※2 The title in the source media will be deleted.
※3 The recording mode cannot be changed.

1 **Insert or connect the media.**

2 **Press [FUNCTION MENU].**

3 **Select “Video” in “Contents on HDD”, then press [OK].**

4 **Select the title, then press the yellow button.**
A check mark is displayed. Repeat this step.



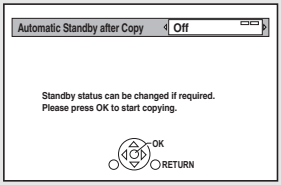
• Press the yellow button again to cancel.

5 **Press the blue button.**

6 **Set the copy direction, then press [OK].**

7 **Select “Yes”, then press [OK].**
• If you select “No”, you can change the selection. (⇨ 60, To change the selection)

8 **Set other settings, then press [OK].**
e.g.,



(⇨ 60, Setting the copying options)

9 **Select “Yes”, then press [OK].**

To register the external HDD (USB HDD)
Refer to “Registering the USB HDD”. (⇨ 83)

To copy HD Video (AVCHD) to the DVD-R in High Definition
Refer to “Copying HD Video (AVCHD) to the DVD-R in High Definition”. (⇨ 66)

Release the disc protection
Refer to “Disc Protection”. (⇨ 105)

- Encrypted titles ( ) cannot be copied. (⇨ 36)
- During copying, do not remove the CI module from this unit.
- If you wish to choose the audio language, select the language from “Multi Audio” of “Preferred Language” before copying (⇨ 93).
- Simultaneous operation is not possible while copying with finalising or creating Top Menu. However, the titles on the HDD can be played back while high speed copying without finalising or creating Top Menu.

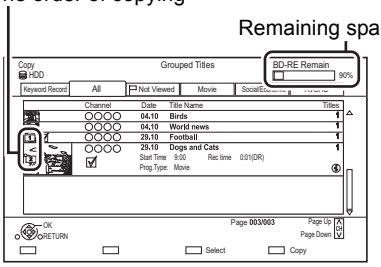
Copying titles

To change the selection

1 Select “No”, then press [OK] in step 7 (⇨ 59).
e.g., HDD → BD-RE (BCT845 BST845)

The order of copying

Remaining space



2 **To change the selected titles:**
Select the title, then press the yellow button.
Repeat this step to select titles.

To change the picture quality:

HDD → BD-RE BD-R RAM DVD-R DVD-RW +R +RW

1 Select the title, then press [OPTION].
2 Select “Conversion Select”, then press [OK].
3 Select the picture quality, then press [OK].
Repeat steps if necessary.

3 Press the blue button.
4 Go to step 7. (⇨ 59)

Screen icons

	Titles that will be copied to the disc in normal speed
	Titles that cannot be copied

About screen icons on the DIRECT NAVIGATOR
Refer to “Screen icons”. (⇨ 44)

Setting the copying options

1 Select the item in step 8 (⇨ 59).
2 Press [◄, ►] to change the settings.

- **Automatic Standby after Copy**
  On:
  This unit is turned to standby mode when it is not operated for approximately 5 minutes after completing copy.

- **Subtitles**
  Automatic:
  Subtitles will be recorded if they are included in the title.

  • If you wish to choose the subtitle, select the language from “Subtitles” or “Preferred Language” before copying (⇨ 93).

- **Finalise**
  On:
  DVD-R DVD-RW +R The discs become play-only and you can also play them on other DVD equipment.

- **Create Top Menu**
  On:
  +RW You can play the disc on other DVD equipment.

• You can perform “Finalise” or “Create Top Menu” later. (⇨ 106)

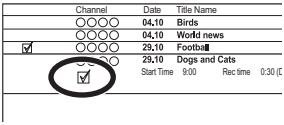
Copying from media other than HDD with DIRECT NAVIGATOR

BD-RE BD-R RAM +RW → HDD

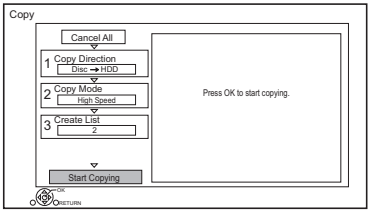
1 Insert a disc.
The menu screen appears. (⇨ 48)

2 Select “Play Video”, then press [OK].

3 Select the title, then press the yellow button.
A check mark is displayed. Repeat this step.



4 Press the blue button.



- To change the detailed settings for copy, refer to “Copying titles with copying list”. (⇨ right)

5 Select “Start Copying”, then press [OK].

6 Select “Yes”, then press [OK].

Copying titles with copying list

HDD	↔	USB HDD ※1, 2, 3
HDD	→	BD-RE BD-R RAM DVD-R DVD-RW +R +RW
USB HDD ※1, 3	→	BD-RE BD-R
BD-RE BD-R RAM +RW	→	HDD

※1 “For recorded titles (⇨ 9)” only

※2 The title in the source media will be deleted.

※3 The recording mode cannot be changed.

1 **HDD ↔ USB HDD:**

1 Press [FUNCTION MENU].

2 Select “Copy Menu” in “Copy Video”, then press [OK].

Except “HDD ↔ USB HDD”:

1 Insert a disc.
The menu screen appears. (⇨ 48)

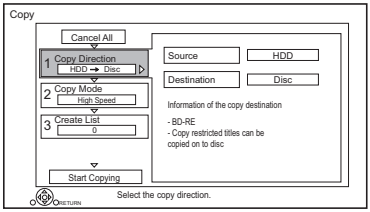
2 Select “Copy”, then press [OK].

2 Set the copy direction.

1 Select “Copy Direction”, then press [►] (right).

2 Set “Source” and “Destination”.

3 Press [◄].



3 Set the recording mode (⇨ 8).

1 Select “Copy Mode”, then press [►] (right).

2 Set “Recording Mode”.

3 Press [◄].

Copying titles

4 Register titles for copy.

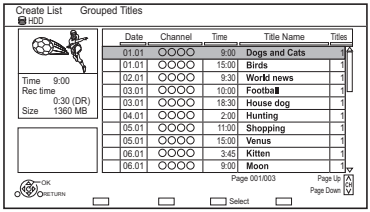
1 Select “Create List”, then press [►] (right).

2 Select “New item”, then press [OK].

3 Select the title, then press the yellow button.

Repeat this step to select titles.

e.g., HDD



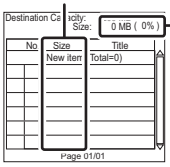
- **To change the appearance of the list or show information of the title**
  1 Press [OPTION].
  2 Select the item, then press [OK].

- The titles will be copied in the order of the copying list. If you want to specify the order, edit the copying list after the titles are selected. (⇨ 63, Editing the copying list)

4 Press [OK].

5 Press [◄].

Data size of each registered title

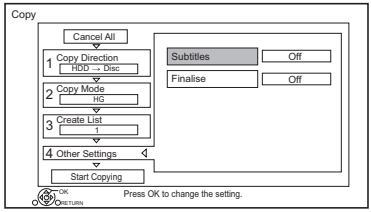


Size:
Data size recorded to the copy destination

5 Make other settings.

1 Select “Other Settings”, then press [►] (right).

e.g.,



- This screen does not appear depending on the copying mode. (⇨ go to step 6)

2 Select the copying option, then press [OK].
(⇨ 60, Setting the copying options)

3 Select the item, then press [OK].

4 Press [◄].

6 Select “Start Copying”, then press [OK].

7 Select “Yes”, then press [OK].

To cancel all registered copying settings and lists

After performing step 1

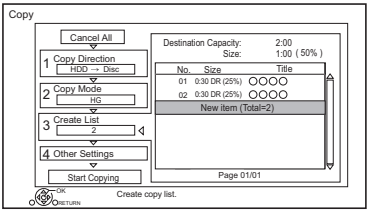
1 Select “Cancel All”, then press [OK].

2 Select “Yes”, then press [OK].

- Encrypted titles ( ) cannot be copied. (⇨ 36)
- If you wish to choose the audio language and subtitle language, select the language from “Multi Audio” of “Preferred Language” before copying (⇨ 93).
- Titles in the grouped titles and other titles cannot be registered simultaneously.

Editing the copying list

1 Select the title after step 4-4 (⇨ 62).



2 Press [OPTION].

3 Select the item, then press [OK].

Delete All:

All titles that you registered to copy are deleted.

Select “Yes”, then press [OK].

Add:

Add new items to the copying list.

1 Select the titles with the yellow button.

2 Press [OK].

Delete:

Selected titles are deleted.

• Select the title, then press the yellow button before step 2.

Repeat this step to select titles.

Select “Yes”, then press [OK].

Move:

Change the order of items on the copying list.

• Select the title to move before step 2.

Select the destination, then press [OK].

- When copying at normal speed, the total data size will change according to the recording mode.
- The total data size shown may be larger than the sum of the data sizes for each registered item.

Screen icons

	Titles that cannot be copied in high speed mode
	Titles that cannot be copied
	Title contains photos • Photos cannot be copied.
N **(NTSC)** P **(PAL)**	Title recorded using a different encoding system from that of the unit. • Titles displaying these marks cannot be selected.

About other screen icons

Refer to “Screen icons”. (⇨ 44)

Copying titles

Notes for copying

Notes for high speed copy

High Speed Copying is the process of copying a title to disc in high speed while maintaining the original record mode and recording length. If any conversion is required during the copy process, the copying will be done at normal speed.

- The following recording mode and media combinations support high speed copying.

Original title's recording mode	Media
DR HG HX HE HL HM	HDD ↔ BD HDD ↔ USB-HDD USB-HDD → BD
XP SP LP EP FR	HDD → DVD HDD ↔ USB-HDD DVD ※ → HDD ※ DVD-RAM only

- Converting the recording mode will result in a normal speed copy.
- High speed copy is possible only when there is enough recording capacity on the destination media.

- It is impossible to copy at high speed in the following cases:
  - HDD → BD-RE BD-R :
    - Copying radio programmes
  - HDD → DVD-R DVD-RW +R +RW :
    - Titles that contain many deleted segments
  - HDD → +R +RW :
    - Titles recorded in "EP" mode and "FR (recordings 5 hours or longer)" mode
    - Titles recorded in 16:9 aspect
  - HDD → DVD-R DVD-RW :
    - Titles recorded via AV input in 16:9 aspect using "EP" mode or "FR (recordings 5 hours or longer)" mode

Notes for normal speed copy

- DVD-R DVD-RW +R +RW You cannot copy to the disc in the following cases.
  - When there is not enough free space on the HDD.
  - When the number of titles recorded to the HDD and the number of titles to be copied to the disc is greater than 3000 in total.

- Copying will continue up to the point cancelled.
  - DVD-R DVD-RW +R +RW If copy is cancelled during the step while temporarily copying to the HDD, then nothing will be copied.
  - BD-R DVD-R DVD-RW +R +RW Even if the title was not copied to the disc, the amount of remaining writable disc space becomes less.

- When copying title recorded in 1080/50p or 1080/60p, it cannot copy in progressive.

Notes for copying

You cannot copy the following titles.

- USB HDD Protected titles
- USB HDD HD Video (AVCHD)
- RAM Radio programme

Notes for copying 3D programmes

- It may not display correctly in 3D when a copied 3D programme is played back. In such a case, change the "Signal Format" during the playback of the title. (⇨ 53)
- 3D information may not be copied.
- If you want to copy 3D AVCHD video to the disc in 3D, use BD-R or BD-RE and copying speed must be high speed.

About maintaining the chapter mark

- The position of the chapter might shift slightly.
- Maximum number of chapters on the disc is limited.
  - BD-RE BD-R RAM DVD-R DVD-RW : Approx. 1000
  - +R +RW : Approx. 254
    (Depends on the state of recording.)

Copying a finalised disc

DVD-V → HDD

While playing a disc, the content being played is copied to the HDD according to the set time.

1 Press [FUNCTION MENU].

2 Select “Copy Menu” in “Copy Video”, then press [OK].

3 Set “Copy Mode”.

1 Select “Copy Mode”, then press [▶] (right).
2 Press [OK], then select the recording mode (XP/SP/LP/EP).
3 Press [◀].

4 Set “Copy Time”.

1 Select “Copy Time”, then press [▶] (right).
2 Select “Time Setting”, then press [OK].
3 Select “On” or “Off”.

On:

Set the copying time.

- Set a few minutes longer than the source title, in order to include the operation time before play begins.

Off:

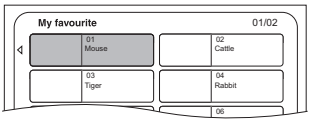
Copying all the content on the disc.

4 Press [◀].

5 Select “Start Copying”, then press [OK].

6 Select “Yes”, then press [OK].

- When the Top Menu is displayed:
  Select the title you want to start copying, then press [OK].



After the last title on the disc has finished playing the Top Menu is recorded until the set time is reached.

To stop copying

Press [STOP ■].

- You can also press and hold [RETURN ⮌] for 3 seconds.
- If stopped partway, copying will be up to that point.

- Operations and on-screen displays during copy are also recorded.
- Almost all DVD-Video on sale have been treated to prevent illegal copying, and cannot be copied.
- If play does not begin automatically press [PLAY/×1.3 ▶] to start.

Copying titles

Copying Title Playing

HDD → BD-RE BD-R RAM DVD-R DVD-RW +R +RW

1 Play back the title to copy.
- Multiple audio, subtitle and Teletext displayed during playback will be copied.
  - Select the multiple audio with “Multi Audio” in the Basic Operation menu (⇨ 85)
  - Select the subtitles with “Subtitle Language” in the Basic Operation menu. (⇨ 85)

2 Press [OPTION].

3 Select “Copy Title Playing”, then press [OK].

4 Select “Start”, then press [OK].
Copying will start from the beginning of the title regardless of the playing position.

To stop copying

Press and hold [RETURN ⮌] for 3 seconds.

- Encrypted titles ( ) cannot be copied.
- You can record to or play HDD while high speed copying. Press [OK] to exit the screen display.
- Press [STATUS ⓘ] to confirm the current progress.

- **Speed and recording mode when copying**
  The high speed copy is performed if available. Refer to “Notes for copying”. (⇨ 64)

- BD-RE BD-R When copying the titles in DR, HG, HX, HE, HL or HM modes and the copy destination does not have enough space, one from HG, HX, HE, HL or HM modes will be selected to match the available space.
- RAM DVD-R DVD-RW +R +RW When copying the titles in DR, HG, HX, HE, HL or HM modes, copy will be performed at normal speed in FR mode.
- When copying the titles in XP, SP, LP, EP or FR modes and the copy destination does not have enough space, copy will be performed at normal speed in FR mode.

Copying HD Video (AVCHD) to the DVD-R in High Definition

You can copy HD Video (AVCHD) recorded on HDD to a DVD-R in High Definition quality.

HDD → DVD-R

1 Insert an unformatted DVD-R or DVD-R DL. The menu screen appears. (⇨ 48)

2 Select “Copy Video (AVCHD) to Disc”, then press [OK].

3 Go to step 4 on page 62, “Copying titles with copying list”.

To copy HD Video (AVCHD) from other equipment

Refer to “Copying the HD Video (AVCHD)”. (⇨ 81)

- This function can only be used for unformatted disc.
- When a disc is named, formatting will be automatically performed. Therefore, do not name a disc before this operation. (⇨ 105, Disc Name)
- Discs will be automatically finalised after copy.
- The following HD Videos (AVCHD) cannot be copied to the disc in high definition.
  - Exceeding 18 Mbps
  - 1080/50p or 1080/60p
  - Without the AVCHD information (video recorded with certain non-Panasonic equipment, video copied to the HDD after copying it to BD-R or BD-RE once, etc.)
- 3D video may not be copied correctly.

Playing photos

HDD USB-HDD ※1 BD ※2 DVD ※3 CD SD USB

※1 “For data files (⇨ 9)” only (JPEG, MPO)

※2 BD-RE only

※3 RAM DVD-R only

- In order to play back 3D photo (MPO), this unit should be connected to a Full HD 3D compatible TV.

1 HDD

1 **Press [FUNCTION MENU].**

2 **Select “Photo” in “Contents on HDD”, then press [OK].**

USB HDD BD-RE RAM DVD-R CD SD USB

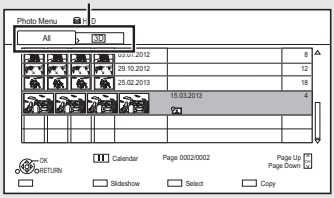
1 **Insert or connect the media.**
The menu screen appears. (⇨ 48)

2 **Select “View Photos”, then press [OK].**

2 Select the folder, then press [OK].

e.g., HDD

Tab



- **To select the tab**
  Press [◄, ►].
- **Start Slideshow**
  Refer to “Slideshow settings”. (⇨ 68)
- HDD
  Switching to the Calendar screen
  Press [PAUSE ❚❚].

3 Select the photo, then press [OK].

- Press [◄, ►] to display the previous or next photo.

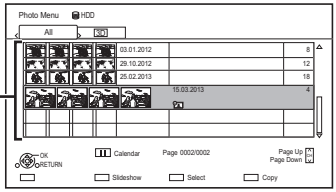
To exit the Calendar screen

Press [PAUSE ❚❚].

- When there are many files and/or folders, some files may not be displayed or not be playable. (⇨ 120)

Photo Menu screen

e.g., HDD



Folder

- Photos imported to the HDD (⇨ 70) are managed using folders.
  Folders and photos can be edited by pressing [OPTION]. (⇨ 69)

Screen icons

3D (Tab)	3D photos (MPO) are automatically sorted. Select from this tab to play back in 3D. (It will play back in 2D when selected from other tabs.)
	Photo protected
	New photo which is stored and not viewed

Playing photos

Photo play option

1 While displaying a photo:
Press [OPTION].

2 Select the item, then press [OK].

Graphic Display Level
You can change the 3D position of the screen display, etc., during the 3D photo playback.

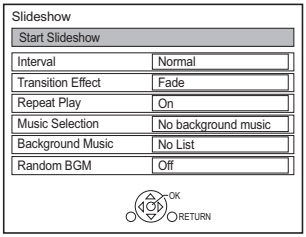
Photo Menu

- **Start Slideshow**
  You can start a slideshow.
- **Rotate RIGHT/Rotate LEFT**
  e.g.,

  - The information of the rotated photos will not be stored depending on the media.
  - This function is not available during the 3D photo playback.
- **Information**
  Information (shooting date etc.) is shown.
- **Wallpaper**
  A photo being played back is registered as wallpaper on the FUNCTION MENU screen. (⇨ 28)

Slideshow settings

1 On the Photo Menu screen:
Press the green button.



2 Select the item, then press [OK].

Start Slideshow
You can start a slideshow.

Interval
You can set up the time until the next photo is to display.

Transition Effect※
Effect for the next photo to display can be set.

Repeat Play
You can set up to play back repeatedly.

Music Selection※
You can select background music on (either from HDD or USB) or off.

Background Music※
You can select background music from HDD (My Favourites or Playlists) or USB (Folder).

Random BGM※
You can play back the BGM (Background Music) in random order.

※ This function is not available during the 3D photo playback.

To pause the Slideshow
Press [PAUSE ❚❚].
- Press [PAUSE ❚❚] again to restart.

To stop the Slideshow
Press [RETURN ⮌].

Editing photos

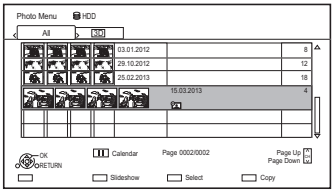
HDD BD ※1 DVD ※2 SD

※1 **BD-RE** only

※2 **RAM** only

1 On the Photo Menu screen:

e.g., **HDD**



To edit the folder:

Select the folder.

To edit the photo:

1 Select the folder, then press [OK].

2 Select the photo to edit.

- **To select multiple folders or photos**

  Press the yellow button when selecting the folder or photo.

  A check mark is displayed. Repeat this step.

  - Press the yellow button again to cancel.

2 Press [OPTION].

- Selectable items will change depending on the media and the type of file.

3 Select the item, then press [OK].

Enter Folder Name

Refer to “Entering text”. (⇨ 107)

Combine Folders

HDD

Select “Yes”, then press [OK].

Delete Folder

Select “Yes”, then press [OK].

Move Photos

HDD

Select “Move to new folder” or “Move to another folder”, then press [OK].

- If “Move to another folder” is selected, set a destination folder.

Delete Photos

Select “Yes”, then press [OK].

Set up Protection

BD-RE **RAM** **SD**

Select “Yes”, then press [OK].

 appears when the protection is set.

- Even if the protection is set, the photo may be deleted by another unit.

Cancel Protection

BD-RE **RAM** **SD**

Select “Yes”, then press [OK].

Photos For Music

HDD

Select “Yes”, then press [OK].

Copying photos

HDD USB-HDD※1 BD※2 DVD※3 CD SD USB

※1 “For data files (⇨ 9)” only (JPEG, MPO)

※2 BD-RE only

※3 RAM DVD-R only

Selecting and copying the photos

HDD	→ BD-RE RAM SD
BD-RE RAM DVD-R CD	→ HDD SD
USB HDD SD USB	→ HDD BD-RE RAM

1 On the Photo Menu screen:

To copy the folder:

Select the folder, then press the blue button.

To copy the photo:

1 Select the folder, then press [OK].

2 Select the photos to copy, then press the blue button.

- **To select multiple folders or photos**

  Press the yellow button when selecting the folder or photo.

  A check mark is displayed. Repeat this step.

  - Press the yellow button again to cancel.

2 Select the copying destination, then press [OK].

3 Select “Yes”, then press [OK].

Copying starts.

To stop copying

Press and hold [RETURN ⮌] for 3 seconds.

- The name of the copied photos will be changed.
- If the number of files/folders to be copied exceeds the maximum (⇨ 120), copying will stop partway through.

Copying automatically

USB HDD BD-RE RAM DVD-R CD SD USB → HDD

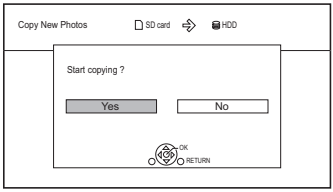
Newly added photos will automatically be copied to the HDD.

1 Insert the media.

The menu screen appears. (⇨ 48)

2 Select “Copy New Photos”, then press [OK].

e.g., SD



3 Select “Yes”, then press [OK].

Copying starts.

4 Once the copy is completed, select “Yes” or “No”, then press [OK].

To stop copying

Press and hold [RETURN ⮌] for 3 seconds.

- Photos without shooting date will be categorised using the creation date.
- If the space on the destination drive runs out or the number of files/folders to be copied exceeds the maximum (⇨ 120), copying will stop partway through.
- The name of the copied photos will be changed.

Playing music

USB HDD ※1 DVD ※2 CD USB

※1 “For data files (⇨ 9)” only (MP3)

※2 DVD-R only

Music CD:

Insert the disc.

Playback will automatically start.

MP3:

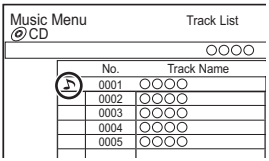
1 **Insert or connect the media.**
The menu screen appears. (⇨ 48)
- DVD-R CD Playback will automatically start if only MP3 is recorded.

2 **Select “Play / Copy Music (MP3)”, then press [OK].**
Playback will start.
- Using the tree screen to find a folder
  1 Press [OPTION].
  2 Select “Select Folder”, then press [OK].
  3 Select the folder, then press [OK].

To play other music (track)

Select the item, then press [OK].

e.g., CD (MP3)



- The track/artist name will be displayed if the information is contained in ID3 tag of the MP3 file.
- If there is a large amount of photo data etc. within a MP3 file, play may not be possible.

To show the playback information in the front panel display

Press [STATUS ⓘ] during playback.
- The playback information, such as the title name, will switch every time it is pressed. (Displayed information varies depending on the type of media.)

Copying music (MP3) to HDD

USB HDD DVD-R CD USB → HDD

After performing steps 1–2 (⇨ left)

1 Press the blue button.

2 Select “Copy”, then press [OK].

To stop copying

Press and hold [RETURN ⮌] for 3 seconds.

- While copying, no other operations can be performed. Timer recordings will not proceed.
- All tracks in the folder will be copied.
- Tracks recorded to HDD in one operation will be regarded as one album.

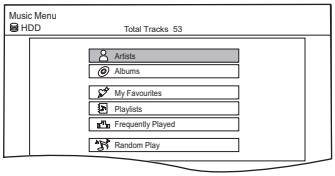
Playing music

Playing music recorded on HDD

HDD

1 Press [FUNCTION MENU].

2 Select “Music” in “Contents on HDD”, then press [OK].



3 Select the item, then press [OK].

Artists

1 Press [◄, ►] to select the initial of the artist.
2 Select the name of the artist, then press [OK].
3 Select the album, then press [OK].
4 Select the track, then press [OK].

Albums

1 Press [◄, ►] to select the initial of the album.
2 Select the album, then press [OK].
3 Select the track, then press [OK].

My Favourites

Tracks registered in “My Favourites”

Select the track, then press [OK].

- Registering a track to the “My Favourites”. (Up to 99 tracks)
  While the track list screen is displayed:
  Select the track, then press the green button.

Playlists

1 Select the playlist, then press [OK].
2 Select the track, then press [OK].

Frequently Played

Tracks most often played recently (up to 30 tracks)

Select the track, then press [OK].

Random Play

Random playback of all tracks

Playback starts.

Showing Track Information

On the track list screen:

1 Select the track, then press [OPTION].
2 Select “Information”, then press [OK].

Operations during music play

HDD USB HDD DVD-R CD USB

Stop

Press [STOP ■].

Pause

Press [PAUSE ❚❚].

• Press [PLAY/×1.3 ▶] to restart play.

Search

Press [SLOW/SEARCH ◀◀] or [SLOW/SEARCH ▶▶].

• Press [PLAY/×1.3 ▶] to restart play.

Skip

Press [SKIP ⏮] or [SKIP ⏭].

Repeat Play/Random

Refer to “Repeat Play” or “Random” in Basic Operation menu (⇨ 85).

Sound Effects

Refer to “Sound Effects” in Sound Settings menu (⇨ 86).

High Clarity Sound

BCT845 BST845

Refer to “High Clarity Sound” in Sound Settings menu (⇨ 86).

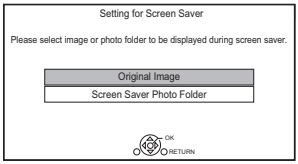
Displaying photos (Screen Saver)

Photos can be displayed during music playback.

While playing the music
Press the red button.

• To select the photos to display
The original photo stored in the HDD by default or a folder registered with “Photos For Music” (⇨ 69) can be selected.
(3D photos in the folder are played back in 2D.)

1 While screen saver is displayed
Press [OPTION].
2 Select “Setting for Screen Saver”, then press [OK].
3 Select the item, then press [OK].
e.g.,


Setting for Screen Saver
Please select image or photo folder to be displayed during screen saver.
Original Image
Screen Saver Photo Folder
OK
RETURN

To end the screen saver

Press [RETURN ⮌].

To play music continuously even if the Power off link works

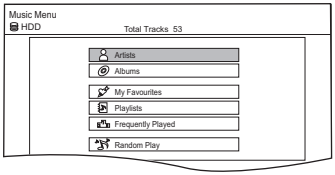
Refer to “Playing music continuously even after turning off power to the TV”. (⇨ 84)

Editing music/playlist

HDD

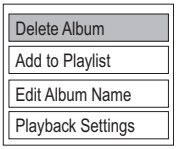
1 On the Music Menu screen:
Press [OPTION].

e.g.,



2 Select the item, then press [OK].

e.g., while selecting an Album



- Editing operations will change depending on the screen.

Delete All Tracks

1 If the confirmation screen appears:
Select “Yes”, then press [OK].

2 Select “Delete”, then press [OK].

Delete Album

Select “Delete”, then press [OK].

Delete

Select “Delete”, then press [OK].

Edit Album Name/Edit Track Name/Edit Artist Name/Edit Playlist Name

Refer to “Entering text” on page 107.

Remove All Tracks

Select “Remove”, then press [OK].

- Tracks themselves are not deleted from the HDD.

Clear My Favourites/Clear Frequently Played

Select “Clear”, then press [OK].

- Tracks themselves are not deleted from the HDD.

Remove

Select “Remove”, then press [OK].

- Tracks themselves are not deleted from the HDD.

Add to Playlist

You can register your favourite albums and tracks into 10 preset playlists.

Select the playlist, then press [OK].

- New playlist cannot be added.
- Up to 999 tracks can be registered to each playlist.

Smart Home Networking (DLNA)

Smart Home Networking (DLNA) allows you to watch the contents and broadcasts on Server equipment connected on the same network from Client equipment.

This unit can be used both as Server and Client. Additionally, if used as Client, this unit can also be used as Media Renderer, which can be controlled by a Smartphone, etc.

Preparation

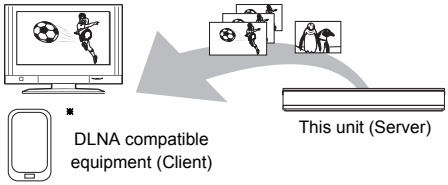
- Network connection (⇨ 21, 26)
- Perform Home Network settings of the DLNA compatible equipment.

For more details, refer to the following website and the operating instructions for each item of equipment.
http://panasonic.jp/support/global/cs/
(This site is in English only.)

- Some video or broadcasts cannot be enjoyed depending on the DLNA (Client) compatible equipment, the condition of this unit, or the file type.
- Ensure that the router for your home network has adequate security system to prevent unauthorized access.
- If using slow network connection, the video may not be displayed correctly. A high-speed home network with a speed of at least 20 Mbps is recommended.

Using this unit as Server

You can watch broadcasts received by this unit (Multiroom TV Streaming), videos and photos saved on HDD of this unit on DLNA (Client) compatible equipment.



For details regarding the connection and operation of equipment connected via a network, refer to their respective operating instructions.

※ DLNA function compatible software should be installed.

Preparation

- When DLNA (Server) Function is deactivated, make the settings. (⇨ 87, 100, Home Network Settings)

1 Operate the playback equipment (Client) to display the list of contents on this unit.
- Refer to their respective operating instructions.

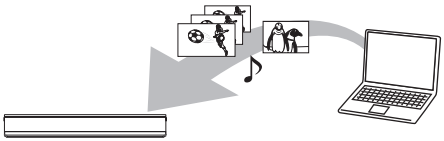
2 Select the item, then press [OK].

- The titles with access restriction (e.g., copy restriction) signals sent from broadcasters are not available for this function.
- You cannot play back music from the playback equipment (Client).
- If video frames are dropped, change the following settings.
  - Conversion Setting for DLNA (⇨ 87, 101)
  - Resolution Setting for DLNA (⇨ 87, 101)
- The DLNA compatible device that is to be connected to the unit should be connected to the same hub or broadband router as the unit.
- Files not on the HDD cannot be played back.
- Playing back 3D video recorded on this unit may not work properly.
- 3D photos copied to this unit cannot be played back in 3D.
- Editing is not possible.

Smart Home Networking (DLNA)

Using this unit as Client

You can share videos, photos and music stored in the DLNA Certified media server (such as a PC with Windows 7 installed etc.).



This unit (Client)

DLNA compatible equipment (Server)

1 Press [FUNCTION MENU].

2 Select “DLNA Client” in “Home Network”, then press [OK].
A list of equipment connected via the network is displayed.
- This list can be updated by pressing the red button.

3 Select the equipment, then press [OK].

4 Select the item, then press [OK].
- Menu structure will be different depending on the equipment. Select the contents by repeating the operation.
- Convenient functions can be used by pressing [OPTION] depending on the contents.
- **Control Panel**
  Control Panel is displayed once the playback starts.
  Operation can be performed with [▲, ▼, ◄, ►], [OK] and [EXIT ⊗].
  - Press [OK] if the Control Panel is not displayed.
  - (While playing video or photo) Press [RETURN ⮌] to hide the Control Panel.

- You may not be able to use the Control Panel even if you use the Panasonic DLNA compatible equipment.
- If you want to display the playback menu while playing back a video on the Panasonic DLNA compatible equipment, press [AUDIO].
- Depending on the contents and the connected equipment, playback may not be possible.
- Playlist of Windows Media® Player can play back only the contents that are stored in the libraries.
- While playing back the 3D programme, you cannot set “3D Settings”. (⇨ 53)
- Items displayed in grey on the display cannot be played back by this unit.
- Depending on the performance of the connected PC, video frames may be dropped during playback, or video may not be played back at all. (⇨ 114)

Playable contents

When this unit works as a DLNA client, following contents are playable.

Video

Container	Video codec	Audio codec	Example of file extension
Recorded programmes (XP/SP/LP/EP/FR)※1	MPEG2	Dolby® Digital Linear PCM	.mpg .mpeg
Recorded programmes (DR/HG/HX/HE/HL/HM)※1	MPEG2 H.264	MPEG HE-AAC Dolby® Digital	.m2ts .ts
AVCHD※1	H.264	Dolby® Digital	.mts
MP4	H.264	AAC	.mp4
MPEG2	MPEG2	Dolby® Digital Linear PCM	.mpg .mpeg
Xvid	H.264	MP3 Dolby® Digital	.avi
MKV	H.264	AAC-LC MP3 Dolby® Digital PCM Vorbis FLAC	.mkv

Photo

Format	Example of file extension
JPEG	.jpg
MPO※1, 2	.mpo

※1 Only when the server is another Panasonic Blu-ray Disc Recorder, etc.

※2 2D playback only.

Audio

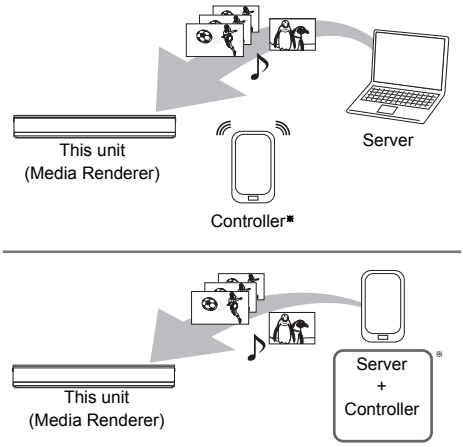
Audio codec	Example of file extension
MP3	.mp3
WAV	.wav
AAC	.m4a
WMA	.wma
FLAC	.flac
Linear PCM	–

- Depending on the server, the contents other than stated above can be played back.

Using this unit as Media Renderer

This unit will work as Media Renderer, which allows you to play back the contents on DLNA Server by operating a Digital Media Controller (a smartphone, etc.).

Possible applications:



※ Digital Media Controller compatible software should be installed.

Following steps are necessary to use this unit as Media Renderer.

1 Press [FUNCTION MENU].

2 Select “Media Renderer” in “Home Network”, then press [OK].

3 Operate the Digital Media Controller compatible equipment.

To exit from Home Network (Media Renderer) screen

Press [RETURN ⮌].

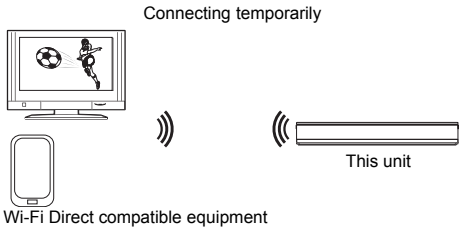
- Depending on the contents and the connected equipment, playback may not be possible.
- Items displayed in grey on the display cannot be played back by this unit.
- This unit can be played back via connected equipment only when controlled using Digital Media Controller.
- Depending on the performance of the connected PC, video frames may be dropped during playback, or video may not be played back at all. (⇨ 114)

Smart Home Networking (DLNA)

Using Smart Home Networking (DLNA) with Wi-Fi Direct™

Wi-Fi Direct is a standard that enables wireless LAN devices to communicate each other directly without a wireless broadband router.

This unit can be connected wirelessly and directly to other DLNA compatible equipment on a temporary basis, regardless of the network connection and settings of this unit.



1 Press [FUNCTION MENU].

2 Select “Wi-Fi Direct” in “Home Network”, then press [OK].

3 Select the item, then press [OK].

- Set up the device to be connected so that a Wi-Fi Direct connection can be made. For details, refer to the operating instructions for the device to be connected.

4 Select the device to be connected, then press [OK].

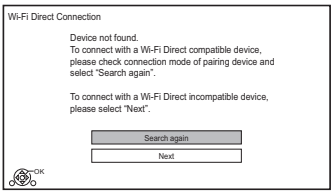
- If the device you want to connect to is not displayed, switch the connection method by pressing the green button.

5 **When selected “DLNA Client”:**
Go to step 4 on page 76.

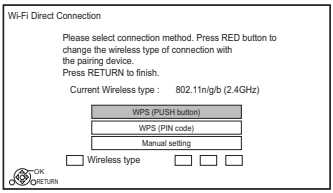
When selected “DLNA Server”:
Operate the playback equipment (Client).

When selected “Media Renderer”:
Operate the Digital Media Controller.

When no devices are found


Wi-Fi Direct Connection
Device not found.
To connect with a Wi-Fi Direct compatible device, please check connection mode of pairing device and select “Search again”.
To connect with a Wi-Fi Direct incompatible device, please select “Next”.
Search again
Next
OK

If the corresponding device is not found even after the search is run again, select “Next” and change the connection method.

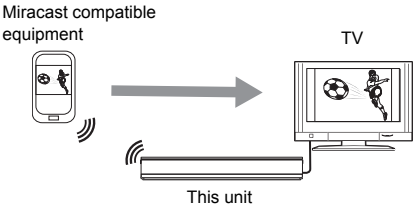

Wi-Fi Direct Connection
Please select connection method. Press RED button to change the wireless type of connection with the pairing device.
Press RETURN to finish.
Current Wireless type : 802.11n/g/b (2.4GHz)
WPS (PUSH button)
WPS (PIN code)
Manual setting
Wireless type
OK
RETURN

Select the connection method according to the device to be connected.

Using Miracast™

You can enjoy the content you are viewing on a Miracast-compatible smartphone, etc. on the big screen of your TV.

- Compatible with Android™ device, ver. 4.2 and above and Miracast certified.
  For information on whether the smartphone, etc. supports Miracast, contact the manufacturer of the device.



1 Press [FUNCTION MENU].

2 Select “Miracast” in “Home Network”, then press [OK].

3 Operate the Miracast compatible equipment.

To exit from Miracast

Press [EXIT ⊗].

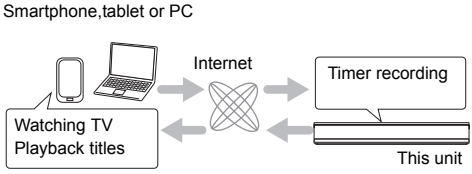
Remote Viewing and Recording

You can use the following functions, etc. away from home using a smartphone, tablet or PC.

- Setting a recording
- Watching TV with this unit's tuner※
- Playing back titles recorded on this unit※

※ Not available for PCs.

(You must register to a service to use these functions.)



For details, please check the following website.

http://panasonic.jp/support/global/cs/

(This site is in English only.)

Preparation

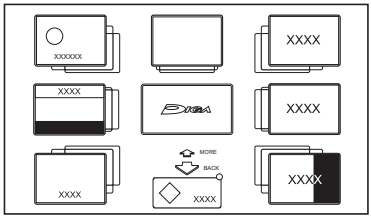
- Network connection (⇨ 21, 26)
- Remote Viewing and Recording settings (⇨ 87, 100)

- This unit will always be connected to the Internet when this function is activated.
- Please note that a regular maintenance or unexpected trouble may interrupt the service, and that the service content may be changed or revoked and operation menu screens may be changed with or without a prior notice.

Enjoying Network Service

Network Service allows you to access some specific websites supported by Panasonic, and enjoy Internet contents such as photos, videos, etc. from Network Service home screen.

e.g.,



Network Service home screen

- Images are for illustration purpose, contents may change without notice.

Preparation

- Network connection (⇨ 21, 26)

1 Press [INTERNET].

The message is displayed. Please read it carefully and then press [OK].

2 Select the item, then press [OK].

- Operable buttons:
  [▲, ▼, ◄, ►], [OK], [RETURN ⊜], colour buttons and number buttons.

To exit

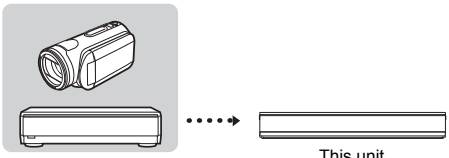
Press [EXIT ⊗].

- Some features of websites may not be available on this unit's web browser.
- In the following cases, settings are possible using "Network Service Settings" (⇨ 87, 100)
  - When restricting the use of Network Service.
  - When the audio is distorted.
- If using slow Internet connection, the video may not be displayed correctly. A high-speed Internet service with a speed of at least 6 Mbps is recommended.
- Be sure to update the software (firmware) when a software (firmware) update notice is displayed on the screen. If the software (firmware) is not updated, you will not be able to use the Network Service function.
- The services through Network Service are operated by their respective service providers, and service may be discontinued either temporarily or permanently without notice. Therefore, Panasonic will make no warranty for the content or the continuity of the services.
- All features of websites or content of the service may not be available.
- Some contents may be inappropriate for some viewers.
- Some contents of Network Service may only be available for specific countries and may be presented in specific languages.
- If timer recording starts, Network Service will stop.

Recording from external equipment

HDD

Recording mode: XP, SP, LP, EP



Amplifier/receiver, video camera, etc.

This unit

Preparation

Connect the Set Top Box or video equipment (⇨ 18)

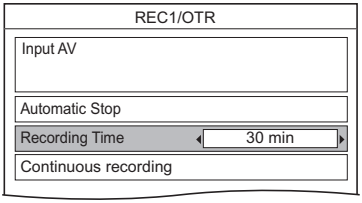
1 Press [INPUT SELECT] and select “AV”, then press [OK].

2 Press [REC MODE] to select the recording mode.

3 Select the channel on the Set Top Box or start play on the video equipment.

4 Press [REC ●].
Recording will start.

5 Set the time to record. (⇨ 34)



To stop recording

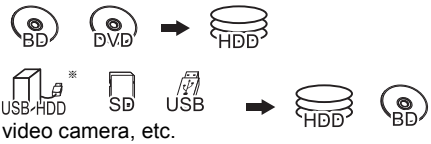
Press [STOP ■].

Manually programming timer recording from external equipment

Refer to “Manually programming timer recording” (⇨ 39).

- Following contents or media cannot be played back while recording from external equipment.
  - BD-Video
  - Xvid, MKV and AVCHD file
  - photo
  - SD card
  - USB HDD (For data files, ⇨ 9) and USB memory

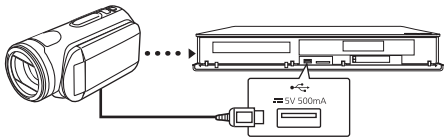
Copying the HD Video (AVCHD)



video camera, etc.

※ “For data files (⇨ 9)” only

e.g., Connecting to the Panasonic video camera



USB connection cable
(optional)

1 Connect the video camera or insert the media.
- Make the video camera ready for data transfer.

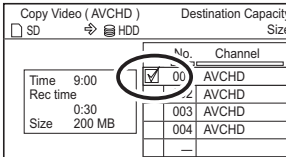
The menu screen appears. (⇨ 48)

2 Select “Copy Video (AVCHD)”, then press [OK].

3 When copying from an SD card or video equipment:
Select “Copy to HDD” or “Copy to Blu-ray Disc”, then press [OK].

4 Select the title, then press the yellow button. A check mark is displayed. Repeat this step.

e.g., SD



- Press the yellow button again to cancel. (All the recordings on the same date become a title.)

5 Press [OK].

6 Select “Start”, then press [OK].
It will automatically format the unformatted disc, such as a new disc.
- It may take time for the copying to start.

To stop copying

Press and hold [RETURN ⮌] for 3 seconds.

To copy to the DVD-R in High Definition

Refer to “Copying HD Video (AVCHD) to the DVD-R in High Definition”. (⇨ 66)

- The original file must be in the AVCHD standard.
- If you connect a Panasonic product with a USB connection cable, setup screen may be displayed on the connected equipment. For details, refer to the instructions for the connected equipment.
- An AVCHD title with 100 or more scenes will be divided into titles every 99th scene and copied.

Screen icons

N **(NTSC)** P **(PAL)**	Title recorded using a different encoding system from that of the unit. • Titles displaying these marks cannot be selected.

Registering the external HDD (USB HDD)

USB HDD ※

※ “For recorded titles (⇨ 9)” only

If you intend to move recorded titles to a USB HDD, the USB HDD must be registered to this unit first.

Limitation information

- A USB HDD with a capacity of less than 160 GB cannot be used.
- Registering of a USB HDD will format the USB HDD and all the content already recorded will be deleted.
- Up to eight USB HDDs can be registered on this unit.
- Registered USB HDDs cannot be used with devices other than this unit.

Regarding the external HDD (USB HDD)

Please use a confirmed USB HDD.
For the latest information on confirmed USB HDDs, please check the following website.

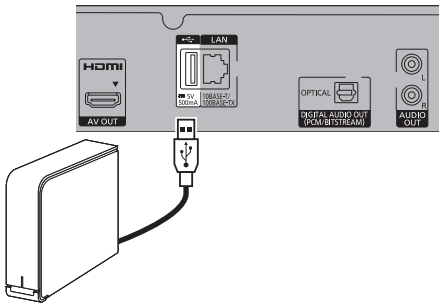
http://panasonic.jp/support/global/cs/

- Certain non-confirmed USB HDDs cannot be used with this unit.
- If a problem occurs with the USB HDD, please contact the manufacturer of the device.

Connecting the USB HDD

Connect this unit with optional USB HDD.

e.g., This unit’s rear panel



- Only one USB HDD (For recorded titles, ⇨ 9) can be connected at the same time.
- Do not connect additional HDDs using a USB hub.
- For details about connection method, refer to the instructions supplied with the USB HDD.

Disconnecting the USB HDD

Please use the following procedure to disconnect. Disconnecting without following this procedure may result in the loss of recorded content from the USB HDD or the internal HDD.

1 Press [FUNCTION MENU].

2 Select “Basic Settings” in “Setup”, then press [OK].

3 Select “Settings for USB HDD” in “HDD / Disc / USB HDD”, then press [OK].

4 Select “USB HDD Disconnection”, then press [OK].

5 Select “Yes”, then press [OK].

6 Disconnect the USB HDD from this unit.

Registering the USB HDD

- If the registering screen appears when connecting the USB HDD, go to step 5.

1 Press [FUNCTION MENU].

2 Select “Basic Settings” in “Setup”, then press [OK].

3 Select “Settings for USB HDD” in “HDD / Disc / USB HDD”, then press [OK].

4 Select “USB HDD Registration”, then press [OK].

5 Select “Yes”, then press [OK].

- If you have already registered eight USB HDDs, it will be necessary to delete one or more of them before registering a new USB HDD.

  The message screen appears:

  1 Select “Yes”, then press [OK].
  2 Select the USB HDD to cancel, then press [OK].
  The confirmation screen appears.
  3 Select “Yes”, then press [OK].

6 When the registering is complete, message screen appears.
Press [OK].

7 The confirmation screen appears.
Press [OK].

To cancel all USB HDD registrations

Refer to “Cancellation of all USB HDD Registrations”. (⇨ 95)

- If you register a USB HDD, all the content already recorded on the USB HDD will be deleted.
- It is not possible to play back the content on the USB HDD whose registration has been cancelled.
- You can check the registration number of the USB HDD on the DIRECT NAVIGATOR. (⇨ 44)

VIERA Link functions

What is VIERA Link “HDAVI Control”?

VIERA Link “HDAVI Control” is a convenient function which will link the operations of this unit and a Panasonic TV (VIERA) or an amplifier/receiver. You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment.

Automatic input switching/ Power on link

When the following operations are performed, the input channel of the TV will be automatically switched and the screen of this unit will be displayed. Additionally when the TV is off, the TV will automatically turn on.

- When play starts on this unit
- When an action that uses DIRECT NAVIGATOR etc, is performed

Power off link

When you set the TV to standby mode, this unit is also automatically set to standby mode.

- Power off link function does not work when recording, copying etc.

Playing music continuously even after turning off power to the TV

The following operations make it possible to keep the power of the unit on and to play music continuously.

When the unit is directly connected to an amplifier/receiver.

1 While playing music
Press [OPTION].

2 Select “TV Power Off”, then press [OK].

- Sound may be discontinued for several seconds when the power to the TV is turned off.
- This function is available with the TV that supports “HDAVI Control 2” or later.

PAUSE LIVE TV

You can operate this unit with the TV remote control.

Refer to “PAUSE LIVE TV”. (⇨ 33)

- This function is available with the TV that supports “HDAVI Control 3” or later.

Direct TV Recording

This function allows you to immediately start recording the programme that you are viewing on the TV.

Refer to the TV operating instructions for operation.

- This function is available with the TV that supports “HDAVI Control 3” or later.

Easy control only with Panasonic TV’s remote control

You can operate this unit using the TV remote control.

Refer to the operating instructions of the TV about the buttons that you can use.

- This function is available with the TV that supports “HDAVI Control 2” or later.

- This unit supports “HDAVI Control 5” function. “HDAVI Control 5” is the standard for Panasonic’s HDAVI Control compatible equipment. This standard is compatible with Panasonic’s conventional HDAVI equipment. Please refer to individual manuals for other manufacturers’ equipment supporting VIERA Link function.
- VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC cannot be guaranteed.
- These functions may not work normally depending on the equipment condition.
- Use the remote control supplied with this unit if you cannot operate this unit using buttons on the TV remote control.
- The operation of this unit may be interrupted when you press certain buttons on the TV remote control.

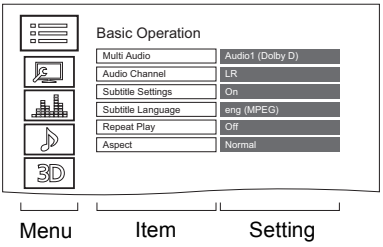
Playback menu

A variety of operations and settings such as changing the subtitles and audio languages can be performed during playback of video or music. Also, picture and sound quality can be set to your personal taste.

1 Press [OPTION].

2 Select “Playback Settings” in “Playback Menu” or select “Playback Settings”, then press [OK].

e.g.,



3 Select the menu, then press [OK].

4 Select the item, then press [OK].

5 Change the setting.

Depending on the condition of the unit (playing, stopped, etc.) and media contents, there may be some items which cannot be selected or for which the effects do not work properly.

To clear the Playback menu

Press [RETURN ⮌] until the Playback menu disappears.

Language

ENG	English	JPN	Japanese	ARA	Arabic
FRA	French	CHI	Chinese	HIN	Hindi
DEU	German	KOR	Korean	PER	Persian
ITA	Italian	MAL	Malay	IND	Indonesian
ESP	Spanish	VIE	Vietnamese	MRI	Maori
NLD	Dutch	THA	Thai	BUL	Bulgarian
SVE	Swedish	POL	Polish	RUM	Romanian
NOR	Norwegian	CES	Czech	GRE	Greek
DAN	Danish	SLK	Slovak	TUR	Turkish
POR	Portuguese	HUN	Hungarian	✳	Others
RUS	Russian	FIN	Finnish		

Basic Operation

- **Soundtrack**※1
  Show or change the soundtrack.
- **Multi Audio**
  Switch in the case of multiple audio.
- **Audio Channel**
  Change audio (LR/L/R) during playback.
- **Subtitle Settings**※1
  Turn the subtitle on/off, and change the language depending on the media.
  - **Subtitle Settings**
  - **Subtitle Style**
    Select the subtitle style recorded on the disc.
  - **Subtitle Position**
  - **Subtitle Luminance**
- **Subtitle Language**
  Select the subtitle language in the case of multiple languages.
- **Angle**※1
  Change the number to select an angle.
- **Repeat Play**
  Select the item which you want to repeat.
- **Random**
  Select whether to play random or not.
- **Video**
  The original video recording method (MPEG-4 AVC etc.) appears.
- **Primary Video**
  The original video recording method appears.
- **Secondary Video**
  - **Video**
    Select on/off of images.
    The original video recording method appears.
  - **Soundtrack**
    Select on/off of audio and the language.
- **Aspect (⇨ 107)**
- **Reception**
  The radio wave status during the playback of Smart Home Networking (DLNA) is displayed. (Only when a wireless connection is used)

※1 With some discs, you may only be able to make changes using the menus on the disc.

Playback menu

Picture Settings

Picture Type[*2]

Select the picture type.

Sharpness Adjustment

Adjusts the sharpness of images. The greater the value is, the sharper images will be.

Noise Reduction

Reduces unnecessary noise in videos. The greater the value is, the less noise will appear.

Luminance / Colour Adjustment

Adjusts the contrast, brightness, white gamma, black gamma, colour saturation and hue.

Bandwidth Limitation

Adjusts the bandwidth limitations.

24p/25p Conversion

Plays back videos with film-like motion.

- This function is available on the following conditions:
  - "HDMI Video Format" set to "Automatic", "1080i※" or "1080p※" (⇨ 98)
    ※ Only for 24p Conversion
  - Connect 24p/25p compatible TV.
- Noise may appear on the image when you switch the setting.

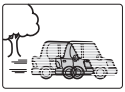
Progressive

Select the method of conversion for progressive output to suit the type of title being played.

- **Auto**

  Automatically detects the film and video content, and appropriately converts it.
- **Video**

  Select this setting when the content is distorted if "Auto" is selected.
- **Film**

  Select this if the edges of the film content appear jagged or rough when "Auto" is selected. However, if the video content is distorted as shown in the illustration to the right, then select "Auto".

Reset to Default Picture Settings

Restores the default settings of the Picture Settings menu.

Sound Effect Settings[*2]

Sound Effects

- This function is effective when "Digital Audio Output" is set to "PCM". (⇨ 96)

Night Surround

Enjoy a movie with powerful sound even when the volume is kept low at night.

Re-master 1-3

Sound becomes more natural by adding higher frequency signals not recorded on the track.

Digital Tube Sound 1-6

This feature gives you a warm sound, like that produced by a vacuum tube amplifier.

Sound Effect Frequency

Set the maximum sampling frequency for the audio selected in "Sound Effects".

Sound Settings

Sound Effects[*3]

- This function is effective when "Digital Audio Output" is set to "PCM". (⇨ 96)

Night Surround (⇨ above)

Re-master 1-2 (⇨ above)

Dialogue Enhancer

The volume of the centre channel is raised to make dialogue easier to hear.

High Clarity Sound[*2]

Stop processing signals that affect the audio quality or turn off the front panel display to make the audio quality clearer.

Select whether or not to output images.

This setting is able to switch by pressing the yellow button during playing music.

3D Settings

Signal Format (⇨ 53)

3D Picture Mode (⇨ 53)

Manual Settings (⇨ 53)

Graphic Display Level

You can change the 3D position of the playback settings display, etc., during the 3D playback.

※2 BCT845 BST845 only

※3 BCT745 BCT740 BST745 BST740 only

- The menu is not displayed when playing photos.

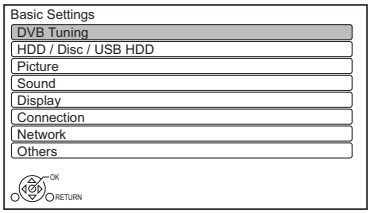
Basic Settings

You can change the unit's settings of DVB Tuning, Sound, Display, Connection, Network etc. in the menu.

Common procedures

1 Press [FUNCTION MENU].

2 Select "Basic Settings" in "Setup", then press [OK].



3 Select the menu, then press [OK].

4 Select the item, then make the setting. (⇨ below)

- Follow the instructions on the screen if further operations are necessary.
- Depending on the connection or the status of this unit some items cannot be selected or changed.

To return to the previous screen

Press [RETURN ⮌].

Menu list

The locations of the setting items are as follows. For details on each setting item, please refer to the following pages.

BCT845 BCT745 BCT740 DVB Tuning

- **Favourites Edit (⇨ 89)**
- **Auto Setup (⇨ 89)**
- **Settings for DVB-C Channels (⇨ 90)**
  - Channel List (⇨ 90)
  - Manual Tuning (⇨ 90)
  - Update Channel List (⇨ 90)
  - Signal Condition (⇨ 90)
  - New Channel Message (⇨ 90)
- **Settings for DVB-T Channels (⇨ 90)**
  - Channel List (⇨ 90)
  - Manual Tuning (⇨ 90)
  - Update Channel List (⇨ 91)
  - Signal Condition (⇨ 91)
  - New Channel Message (⇨ 91)
- **Child Lock (⇨ 91)**
  - Child Lock List (⇨ 91)
  - Parental Rating (⇨ 91)
- **Preferred Language (⇨ 91)**

BST845 BST745 BST740 DVB Tuning

- **Favourites Edit (⇨ 91)**
- **Channel List (⇨ 92)**
- **Auto Setup (⇨ 92)**
- **Manual Tuning (⇨ 92)**
- **Update Channel List (⇨ 92)**
- **Exchange Channel List (⇨ 92)**
- **Signal Condition (⇨ 93)**
- **Antenna System (⇨ 93)**
- **LNB Configuration (⇨ 93)**
- **Preferred Language (⇨ 93)**

HDD / Disc / USB HDD

- **Settings for Playback (⇨ 93)**
  - 3D BD-Video Playback (⇨ 93)
  - Soundtrack (⇨ 93)
  - Subtitles (⇨ 93)
  - Menu (⇨ 93)
  - BD-Live (⇨ 93)
  - BD-Video Parental Control (⇨ 93)
  - DVD-Video Parental Control (⇨ 94)
  - Subtitle Text (⇨ 94)
  - Pure Sound mode (⇨ 94)
- **Settings for Recording (⇨ 94)**
  - Timer Record Start Buffer (⇨ 94)
  - Timer Record Stop Buffer (⇨ 94)
  - REWIND LIVE TV (⇨ 94)
  - Recording for Encrypted Channel (⇨ 94)
  - PIN Entry for Decrypt Recording (⇨ 94)
  - Aspect for Recording (⇨ 94)
  - Chapter Creation (⇨ 95)
  - Disc Speed for High Speed Copy (⇨ 95)
- **HDD Management (⇨ 95)**
  - Delete all titles (⇨ 95)
  - Delete all photos (⇨ 95)
  - Format HDD (⇨ 95)
- **Settings for USB HDD (⇨ 95)**
  - USB HDD Registration (⇨ 95)
  - USB HDD Disconnection (⇨ 95)
  - USB HDD Management (⇨ 95)
    - Delete all titles (⇨ 95)
    - Format USB HDD (⇨ 95)
  - Cancellation of all USB HDD Registrations (⇨ 95)

Basic Settings

Picture

- **Still Mode (⇨ 96)**

Sound

- **Dynamic Range Compression (⇨ 96)**
- **Downmix (⇨ 96)**
- **Bilingual Audio Selection (⇨ 96)**
- **Digital Audio Output (⇨ 96)**
  - PCM Down Conversion (⇨ 96)
  - Dolby D / Dolby D + / Dolby TrueHD (⇨ 96)
  - DTS / DTS-HD (⇨ 96)
  - MPEG (⇨ 96)
  - BD-Video Secondary Audio (⇨ 96)
- **HDMI Output Settings of Music Playback※1(⇨ 97)**
- **Settings for High Clarity Sound※1(⇨ 97)**
  - Audio Output (⇨ 97)
  - Front Panel Display (⇨ 97)
- **Audio Delay (⇨ 97)**
- **Audio for HG / HX / HE / HL / HM Recording (⇨ 97)**

Display

- **Language (⇨ 97)**
- **On-Screen Information (⇨ 97)**
- **Front Panel Display (⇨ 97)**
- **Screen Saver (⇨ 97)**
- **Teletext (⇨ 97)**

Connection

- **3D Settings (⇨ 98)**
  - 3D Type (⇨ 98)
  - 3D AVCHD Output (⇨ 98)
  - 3D Playback Message (⇨ 98)
- **TV Aspect (⇨ 98)**
- **Aspect for 4:3 Video (⇨ 98)**
- **TV System (⇨ 98)**
- **HDMI Connection (⇨ 98)**
  - HDMI Video Format (⇨ 98)
  - 24p Output (⇨ 98)
  - Deep Colour Output (⇨ 98)
  - HDMI Audio Output (⇨ 98)
  - Contents Type Flag (⇨ 99)
  - VIERA Link (⇨ 99)
- **Common Interface (⇨ 99)**

Network

- **Easy Network Setting (⇨ 99)**
- **Network Settings (⇨ 99)**
  - LAN Connection Mode (⇨ 99)
  - Wireless Settings (⇨ 99)
    - Connection Setting (⇨ 99)
    - Double Speed Mode Setting (2.4GHz) (⇨ 99)
  - IP Address / DNS Settings (⇨ 100)
  - Proxy Server Settings (⇨ 100)
  - Network Service Settings (⇨ 100)
    - Second Screen Browsing (⇨ 100)
    - Lock (⇨ 100)
    - Automatic Volume Control (⇨ 100)
    - Notice (⇨ 100)
  - Remote Viewing and Recording settings (⇨ 100)
    - Remote Viewing and Recording (⇨ 100)
    - Device ID (⇨ 100)
    - Initialize Device Password (⇨ 100)
  - Home Network Settings (⇨ 100)
    - Home Network function (⇨ 100)
    - Setting device name (⇨ 101)
    - Conversion Setting for DLNA (⇨ 101)
    - Resolution Setting for DLNA (⇨ 101)
    - Registration type for remote devices (⇨ 101)
    - Remote device list (⇨ 101)

Others

- **Standby Settings (⇨ 101)**
  - Quick Start (⇨ 101)
  - Automatic Standby (⇨ 101)
  - Automatic Standby after OTR (⇨ 101)
  - Automatic Standby after Copy (⇨ 102)
  - DVB-C RF OUT (CATV Signal)※2 (⇨ 102)
  - DVB-T RF OUT (Aerial Signal)※2 (⇨ 102)
  - Power Save for Network Standby (⇨ 102)
- **Remote Control (⇨ 102)**
- **Clock (⇨ 102)**
- **PIN Entry (⇨ 102)**
- **System Update (⇨ 103)**
  - Software Update in Standby (⇨ 103)
  - Software Update Now (Broadcast) (⇨ 103)
  - Software Update Now (Internet) (⇨ 103)
  - Software Licence (⇨ 103)
- **System Information (⇨ 103)**
- **Initialize (⇨ 103)**
  - Shipping Condition (⇨ 103)
  - Default Settings (⇨ 103)

※1 **BCT845** **BST845** only

※2 **BCT845** **BCT745** **BCT740** only

BCT845 BCT745 BCT740 DVB Tuning

Favourites Edit

You can create four favourites of channels for making viewing and recording easier.

After editing as follows, save the Favourites.
Press [RETURN ⮌], then press [OK].

- To select the other Favourites list:
  Press the green button.
- To add channels to the Favourites list:
  Select the channel in the “All DVB Channels” column, then press [OK]. Repeat this step.
  - Red: Change the sorting mode.
  - Yellow: Add continuous block of channels to the list at once.
    - Press [▲, ▼] to make the block, then press [OK].
  - Blue: Select the Category.
- To change the order of the channels list:
  1 Select the channel in the “Favourites” column to move, then press the green button.
  2 Select the new position, then press the green button.
- To delete channels:
  Select the channel in the “Favourites” column, then press [OK].
  - Yellow: Delete all channels.
- To change the name of the Favourites list:
  1 Press the red button in the “Favourites” column.
  2 Press [▲, ▼, ◄, ►] to select a character, then press [OK].
  Repeat this step to enter other characters.
    - Red: Delete a character.
    - Blue: Delete all characters.
  3 Press [RETURN ⮌].

Auto Setup

You can restart the Auto Setup. (⇨ 23)

1 Select “Yes”, then press [OK].
  - If the country selection screen appears:
    Select the country, then press [OK].

2 Follow the on-screen instructions and make the following settings.

DVB-C

1 Select “Digital Cable (DVB-C) Channels”, then press [OK].
2 Select “Preset Channel Number” or “Operator’s Channel Number (LCN)”, then press [OK].
3 Select the items and change the items. (For details, consult the cable provider.)

Search Mode

- All Channels
  Search for all channels.
- Free Channels
  Search for free channels only.

Scan Mode

- Quick:
  Scans the suitable frequency for the selected country.
- Full:
  Scans the whole frequency range.

Frequency/Symbol Rate/Network ID

Normally set to “Auto”.
If “Auto” is not displayed or if necessary, enter the value specified by your cable provider with number buttons.

4 Select “Start scan”, then press [OK].
Auto Setup starts.

DVB-T

Select “Digital Terrestrial (DVB-T) Channels”, then press [OK].
Auto Setup starts.

- The timer recording programmes are cancelled.

Basic Settings

Settings for DVB-C Channels

DVB-C

Channel List

You can edit the channel list.

- To hide/reveal channels
  1 Select the channel.
  2 Press [OK].
  The check mark is removed/displayed.
  - Red: Change the sorting mode.
  - Yellow: Reveal all channels.
  - Blue: Change the Category.
- To change the channel number assignment
  1 Select the channel to change, then press the green button.
  2 Enter the channel number to reassign with the number buttons.
  3 Press [OK].

Manual Tuning

You can add new channels manually.

1 Adjust the frequency, symbol rate and service ID. (For details, consult the cable provider.)
  - Adjust the frequency by checking the signal strength and signal quality displays.

2 Select “Start scan”, then press [OK].
  - The set channel is displayed in the table.

- This function is not available during an Operator profile update. (⇨ 32)

Update Channel List

You can update the channel list to the latest one.

- This function is not available during an Operator profile update. (⇨ 32)

Signal Condition

You can check the quality and strength of signals.

Press [CH ∧ ∨] to select the channel.

- When the signal is too strong (red bar), reduce the CATV signal. (For details, consult your dealer or the cable provider.)
- When the signal is weak, check that the current broadcast channel is correctly broadcasting.

New Channel Message

Set whether to obtain the information automatically when a new DVB channel is added.

Settings for DVB-T Channels

DVB-T

Channel List

You can edit the channel list.

- To hide/reveal channels
  1 Select the channel.
  2 Press [OK].
  The check mark is removed/displayed.
  - Red: Change the sorting mode.
  - Yellow: Reveal all channels.
  - Blue: Change the Category.
- To change the channel number assignment
  1 Select the channel to change, then press the green button.
  2 Enter the channel number to reassign with the number buttons.
  3 Press [OK].

Manual Tuning

You can add new channels manually.

1 Press [▲, ▼] to select the frequency.
  - Adjust the frequency by checking the signal strength and signal quality displays.

2 Press [OK] to start scan.
  - The set channel is displayed in the table.

Update Channel List

You can update the channel list to the latest one.

Signal Condition

You can check the quality and strength of signals.

Press [CH ∧ ∨] to select the channel.

- The channels you can receive are affected by weather conditions, seasons, time (day/night), region, length of the cable that is connected to the aerial, etc.
- When the signal is too strong (red bar), reduce the signal amplification at your aerial. (For details, consult your dealer.)

New Channel Message

Set whether to obtain the information automatically when a new DVB channel is added.

Child Lock

• PIN is required to change. (⇨ 29)

Child Lock List

You can restrict the viewing of channels and playback of titles. You can lock each channel or AV input.

1 Select the channel or AV input to lock.

2 Press [OK].

Ⓖ is displayed.

- Press [OK] again to cancel.
- Green: Lock all channels.
- Yellow: Unlock all channels.

Parental Rating

You can restrict the viewing and recording of channels unsuitable to children.

Set a ratings level to limit broadcast viewing and playback.

- Follow the on-screen instructions.

Preferred Language

Select the language for multi broadcast.

If the selected language is not available, the original language will be selected.

BST845 BST745 BST740 DVB Tuning

Favourites Edit

You can create four favourites of channels for making viewing and recording easier.

After editing as follows, save the Favourites.
Press [RETURN ⮌], then press [OK].

- To select the other Favourites list:
  Press the green button.
- To add channels to the Favourites list:
  Select the channel in the “All DVB Channels” column, then press [OK]. Repeat this step.
  - Red: Change the sorting mode.
  - Yellow: Add continuous block of channels to the list at once.
    - Press [▲, ▼] to make the block, then press [OK].
  - Blue: Select the Category.
- To change the order of the channels list:
  1 Select the channel in the “Favourites” column to move, then press the green button.
  2 Select the new position, then press the green button.
- To delete channels:
  Select the channel in the “Favourites” column, then press [OK].
  - Yellow: Delete all channels.
- To change the name of the Favourites list:
  1 Press the red button in the “Favourites” column.
  2 Press [▲, ▼, ◄, ►] to select a character, then press [OK].
  Repeat this step to enter other characters.
    - Red: Delete a character.
    - Blue: Delete all characters.
  3 Press [RETURN ⮌].

Basic Settings

Channel List

You can edit the channel list.

- To hide/reveal channels
  1 Select the channel.
  2 Press [OK].
  The check mark is removed/displayed.
  - Red: Change the sorting mode.
  - Yellow: Reveal all channels.
  - Blue: Change the Category.
- To move the channel number assignment
  1 Select the channel to change, then press the green button.
  2 Input the channel number to move.
  3 Press [OK].
  - If another channel is already assigned to the channel number, the two channels will be switched.

Auto Setup

You can restart the Auto Setup. (⇨ 25)

1 Select the Auto Setup method, then press [OK].
- Search by selected satellite
  Transponders for the already found satellite are searched for channels.
- Search all satellites
  All satellites and transponders are searched for channels.

2 Select “Yes”, then press [OK].

- The timer recording programmes are cancelled.

Manual Tuning

You can add new channels manually.

1 Select the items and change the items.
- Change the items by checking the signal strength and signal quality displays.

2 Select “Start scan”, press [OK] to start scan.
- The set channel is displayed in the table.

- This function is not available during an Operator profile update. (⇨ 32)

Update Channel List

You can update the channel list to the latest one.

1 Select the method and settings.

Search Mode
- Free Channels
  Search for free channels only.
- All Channels
  Search for all channels.

Scan Mode
- Quick
  Scans the suitable frequency for the selected satellite.
- Full
  Scans the whole frequency range.

2 Press [OK].
The unit starts searching for newly available satellite digital channels.

- This function is not available during an Operator profile update. (⇨ 32)

Exchange Channel List

Exports/Imports DVB-S Channel List settings using the SD card to share the same settings with another DIGA which has the same function.

- Export Channel List
  You can export the channel list of this unit to the SD card.
- Import Channel List
  You can import the channel list of another DIGA from SD card.

Signal Condition

You can check the quality and strength of signals.

- Press [◄, ►] to select the LNB.
- Press [CH ∧ ∨] to select the channel.

- The channels you can receive are affected by weather conditions, seasons, time (day/night), region, length of the cable that is connected to the aerial, etc.
- When the signal is too strong (red bar), reduce the signal amplification at your aerial.
- When the signal is weak:
  - adjust the position and direction of the dish.
  - check that the current digital broadcast channel is correctly broadcasting.

Antenna System

You can receive several satellites if you have DiSEqC control antenna system or single cable router.

1 Select “Antenna System”.
2 Press [◄, ►] to select antenna system.
  - One LNB
    Compatible with Single LNB.
  - MiniDiSEqC
    Up to 2 LNBs can be controlled.
  - DiSEqC1.0
    Up to 4 LNBs can be controlled.
  - Single Cable
    Compatible with single cable router.

- This unit supports DiSEqC Version 1.0.

LNB Configuration

You can set LNB setting and User Band when necessary.

- If you do not know the connected satellite, select “No Satellite” in “Satellite”. (Available satellite will be searched in Auto Setup.)
- If you select “User defined” in “Satellite”, set “Test Transponder Frequency” manually.

Preferred Language

Select the language for multi broadcast.
If the selected language is not available, the original language will be selected.

HDD / Disc / USB HDD

Settings for Playback

3D BD-Video Playback

Select the playback method of 3D compatible video software.

Soundtrack

Select the audio language.

- If “Original” is selected, the original language of each disc will be selected.
- Enter a code with the number buttons when you select “Other ✳✳✳✳”.
  (⇨ 103, Language code list)

Subtitles

Select the language for subtitle.

- If “Automatic” is selected and the language selected for “Soundtrack” is not available, subtitles of that language will automatically appear if available on that disc.
- Enter a code with the number buttons when you select “Other ✳✳✳✳”.
  (⇨ 103, Language code list)

Menu

Select the language for disc menus.

- Enter a code with the number buttons when you select “Other ✳✳✳✳”.
  (⇨ 103, Language code list)

BD-Live

You can restrict Internet access when BD-Live functions are used.

- If “On (Limit)” is selected, Internet access is permitted only for BD-Live contents which have content owner certificates.

BD-Video Parental Control

Set an age limit of BD-Video play.

- PIN is required to change. (⇨ 29)

Basic Settings

DVD-Video Parental Control

Set a rating level to limit DVD-Video play.

• PIN is required to change. (⇨ 29)

Subtitle Text

Select the language for Xvid and MKV subtitles text.

• This item is displayed only after playing back a Xvid or MKV file with subtitle text.

Pure Sound mode

You can enjoy movies or music in an environment more suitable for viewing by stopping the rotation of the HDD when playing back commercial BD-Videos, DVD-Videos or music CDs.

• If “On” is selected, timer recording does not start during playback BD-Video, DVD-Video or music CD.

Settings for Recording

Timer Record Start Buffer

This function sets the timer recording to start earlier than the TV Guide time.

Timer Record Stop Buffer

This function sets the timer recording to stop later than the TV Guide time.

REWIND LIVE TV

Turn on/off the REWIND LIVE TV function.

• When “Automatic Standby” is set to “Off” (⇨ 101), “On” cannot be selected.

Recording for Encrypted Channel

The function allows you to change the recording limitation on the encrypted programme. (⇨ 36)

BST845 BST745 BST740

• “Automatic” cannot be selected in the following cases.

- “DiSEqC (Single Tuner)” has been selected in “Easy Setting” or “Auto Setup”. (⇨ 25, 92)

PIN Entry for Decrypt Recording

If your CAM requires a PIN for timer recording, it can be entered here in advance.

Aspect for Recording

Sets the aspect ratio when recording or copying except in DR mode.

• “HG”, “HX”, “HE”, “HL” or “HM” mode:
If “Automatic” is selected, the title will be recorded with the original aspect ratio.

• “XP”, “SP”, “LP” or “FR (recordings less than 5 hours)” mode:
If “Automatic” is selected, the title will be recorded with the original aspect ratio at the time when recording started (including when recording started at a commercial, etc.).

• “EP” or “FR (recordings 5 hours or longer)” mode:
If “Automatic” is selected, aspect is fixed to 4:3.

• In the following cases, the programme will be recorded with the original aspect ratio.

- BD-RE BD-R When the recording mode is set to “XP”, “SP”, “LP”, “EP” or “FR”

• In the following cases, aspect is fixed to 4:3.

- When recording to a +R, +R DL and +RW.

Chapter Creation

Set the Chapter Creation method.

- Even if “Automatic” is selected, depending on the programme to be recorded, the chapter may not be created correctly.

Disc Speed for High Speed Copy

Select the speed of high-speed copying.

If “Normal (Silent)” is selected, the time required for copying will be longer.

HDD Management

Press and hold [OK] for 3 seconds to show the following settings.

Delete all titles

Delete all titles (video) on the built-in HDD.

- Delete does not work if one or more titles are protected.

Delete all photos

Delete all photos on the built-in HDD.

Format HDD

Formatting deletes all contents on the built-in HDD, and they cannot be restored. Check carefully before proceeding.

Settings for USB HDD

USB HDD Registration

Register the USB HDD. (⇨ 83)

USB HDD Disconnection

This function puts the USB HDD in a state in which it can be safely disconnected. (⇨ 82)

USB HDD Management

Press and hold [OK] for 3 seconds to show the following settings.

Delete all titles

Delete all titles on the USB HDD.

- Delete does not work if one or more titles are protected.

Format USB HDD

Formatting deletes all contents, and they cannot be restored. Check carefully before proceeding.

Cancellation of all USB HDD Registrations

This function cancels the registrations of all the USB HDDs registered on this unit.

Only do this if you are going to dispose of this unit.

- Before operation, perform “USB HDD Disconnection” (⇨ above) and remove the USB HDD.
- It is not possible to play back the content from a USB HDD whose registration has been cancelled.

Basic Settings

Picture

Still Mode

Select the type of picture shown when you pause play.

- Field:
  Select if jittering occurs when “Automatic” is selected. (The picture is coarser.)
- Frame:
  Select if small text or fine patterns cannot be seen clearly when “Automatic” is selected. (The picture is clearer and finer.)

Sound

Dynamic Range Compression

To lower the dynamic range for playback (e.g., at night).

- This does not work depending on broadcasts and recorded titles.

Downmix

Select the downmix system of multi-channel to 2-channels sound.

- Select “Surround encoded”, when the connected equipment supports the virtual surround function.
- There is no effect on “Bitstream” via HDMI AV OUT and DIGITAL AUDIO OUT terminal.
- The audio will be output in “Stereo” in the following cases.
  - AVCHD playback
  - BD-V : Playback of clicking sound on the menu and audio with secondary video in picture-in-picture mode.

Bilingual Audio Selection

Select whether to record the audio type (“M1” or “M2”) when:

- File Conversion (⇨ 56)
- Copying to a DVD-R, DVD-RW, +R and +RW.

Digital Audio Output

PCM Down Conversion

Select how to output audio with a sampling frequency of 96 kHz.

- On:
  Signals are converted to 48 kHz.
  (Choose when the connected equipment cannot process signals with a sampling frequency of 96 kHz.)
- Off:
  Signals are output as 96 kHz.
  - The signals will be converted to 48 kHz regardless of the setting in the following cases.
    - The signals have a sampling frequency of over 96 kHz.
    - The disc has copy protection.
    - “BD-Video Secondary Audio” is set to “On”. (BD-V) (⇨ below)

Dolby D / Dolby D + / Dolby TrueHD
DTS / DTS-HD
MPEG

Select the audio signal to output.

- Select “PCM” when the connected equipment cannot decode the respective audio format.
- Not making the proper settings may result in noise.

BD-Video Secondary Audio

Turn on/off the clicking sound on the menu and audio with secondary video.

BCT845 BST845

HDMI Output Settings of Music Playback

Select the HDMI output settings.

- If “Sound Quality Priority” is selected, the audio noise is minimised during music playback by automatically switching the video output to 1080i.

BCT845 BST845

Settings for High Clarity Sound

You can set “Audio Output” and “Front Panel Display” when “High Clarity Sound” (⇨ 86) is set to “On (Video Off)” or “On(Video On)”.

Audio Output

Select a terminal that will stop processing audio signals.

- Set an option for video playback and audio playback.

Front Panel Display

Select whether or not to turn on/off the front panel display.

- Set an option for video playback and audio playback.

Audio Delay

Mis-sync between the video and audio is corrected by delaying the audio output.

Audio for HG / HX / HE / HL / HM Recording

If the programme has multi channel audio, priority is given to what you select.

- This setting will give effect in the following cases.
  - Timer recording (⇨ 38)
  - File Conversion (⇨ 56)
  - Normal speed copy in HG, HX, HE, HL or HM mode from a title recorded in DR mode. (⇨ 61, 64)

Display

Language

Select the language for on-screen menus.

On-Screen Information

Select the time until the channel information screen (⇨ 31) disappears automatically.

Front Panel Display

Changes the brightness of the front panel display.

- If “Automatic” is selected, the display turns dark during play and disappears when the unit is in standby mode. While using this mode, the standby power consumption can be reduced.
- When “Quick Start” is set to “Off” or “Timer Setting for Quick Start” (⇨ 101), this function is fixed to “Automatic”.

Screen Saver

This is to prevent burn-in on the screen.

Teletext

Select the Teletext (⇨ 32) display mode.

Basic Settings

Connection

3D Settings

3D Type

If 3D video cannot be played back in 3D, you may be able to play it in 3D by changing the setting.

- Change the settings for 3D on the TV also when “Side by side” is selected.

3D AVCHD Output

If 2D AVCHD video is recognised as 3D video and cannot be played back correctly, you may be able to play it by changing the setting.

3D Playback Message

Set to display or hide the 3D viewing warning screen.

TV Aspect

Set to match the type of TV connected.

- Pan & Scan:
  Side picture is trimmed for 16:9 picture.

  The pictures may be shown in the letterbox style depending on the content.
- Letterbox:
  Black bands appear for 16:9 picture.

Aspect for 4:3 Video

To play a 4:3 title, set how to show pictures on a 16:9 TV.

- 4:3:
  Picture output expands left or right.
- 16:9:
  Picture is output as original aspect with side panels.

TV System

Set in accordance with the TV System for the connected TV.

HDMI Connection

HDMI Video Format

You can only select items compatible with the connected equipment.

- If “Automatic” is selected, the output resolution best suited to the connected TV (1080p, 1080i, 720p or 576p/480p) is automatically selected.
- To enjoy High Quality Video up-converted to 1080p, you need to connect the unit to 1080p compatible HDTV. If this unit is connected to an HDTV through other equipment, it must also be 1080p compatible.

24p Output

When playing BD-Video recorded in 24 frames, this unit displays each frame at 1/24 second intervals–the same interval originally shot with the film movie.

- When this unit is connected to TV compatible with 4K/24p and “HDMI Video Format” is set to “Automatic”, images will be output in 4K/24p.
- When this unit is connected to a TV compatible with 1080/24p and “HDMI Video Format” is set to “Automatic”, “1080i” or “1080p”, images will be output in 1080/24p.

- When BD-Video images other than 24p are played, images are output at 60p.
- This unit cannot output 4K image when playing back in 3D.

Deep Colour Output

This setting is for selecting whether to use Deep Colour output when a TV that supports Deep Colour is connected.

HDMI Audio Output

Select “Off” when connected to an amplifier/receiver with a DIGITAL AUDIO OUT terminal.

Contents Type Flag

If “Automatic” is selected, the optimal method of playback depending on the TV (e.g. cinema) will automatically be selected (only when the TV supports Contents Type Flag).

VIERA Link

Select “Off” when you do not want to use “HDAVI Control”.

Common Interface

Access to software contained on CI module. (⇨ 14)

- Select “Slot 1:” or “Slot 2:” and press [OK]. Follow the on-screen instructions.
- This setting cannot be made when “TV System” is set to “NTSC” (⇨ 98).

- On-screen instructions may not correspond to the remote control buttons.
- For more information about TV service, please contact your service provider.
- Depending on the card, in some cases its use together with this unit may be limited or not possible.

Network

Easy Network Setting

Press [OK] to start Easy Network Setting. (⇨ 26)

Network Settings

LAN Connection Mode

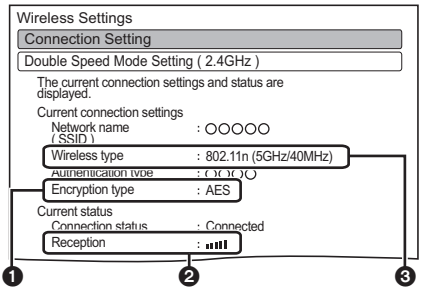
Select the LAN connection method.

- When not using wireless LAN (when turning it off), select “Wired”.

Wireless Settings

This allows to set and check the connection settings of the Wireless router.

e.g.,



❶ Encryption type
❷ Reception
❸ Type of wireless router

Connection Setting

The Wireless router connection wizard will be displayed.

Double Speed Mode Setting (2.4GHz)

When a 2.4 GHz wireless format is used, this setting sets the connection speed.

- If you connect using the “Double Speed Mode (40MHz)”, 2 channels use the same frequency band, and there is consequently a greater risk of reception interference. This can cause the connection speed to drop or the connection to become unstable.

Basic Settings

IP Address / DNS Settings

Check the connection of the network or set the IP address and DNS.

- To set the IP address and DNS
  1 Set “IP Address Auto-assignment” and “DNS-IP Auto-assignment” to “Off”.
  2 Select the item, then press [OK] to show the respective setting.
- When the router’s DHCP server function is not activated, check the numbers of other connected devices such as personal computers, then assign a number different from those of other devices for the “IP Address” and assign the same number for “Subnet Mask” and “Gateway Address”.

Proxy Server Settings

Check and set the connection to the Proxy server.

- Press [OK] to show the respective setting.

Network Service Settings

Second Screen Browsing

When this function is set to “On”, you can enjoy the content you are viewing on a Network Service application of smartphone, etc. with the home network on the big screen of your TV.

Lock

You can restrict using Network Service.

- PIN is required to change. (⇨ 29)

Automatic Volume Control

Volume is adjusted automatically to the standard volume while using Network Service.

- Depending on contents, this function will not work.
- Select “Off” when the audio is warped.

Notice

Displays the terms of service for the cloud services.

- You must agree to the terms of use for the Internet function and the privacy policy.

Remote Viewing and Recording settings

You must register to a service to use this function.

For details please check the following website.

http://panasonic.jp/support/global/cs/

(This site is in English only.)

Remote Viewing and Recording

When you control this unit from a smartphone or a tablet away from home, set this function to “On”. (⇨ 79)

Device ID

This is the device ID and device password required for registering to and using a service.

Initialize Device Password

The device password for this unit is initialized.

- When you initialize the device password, you will not be able to use Remote Viewing and Recording. To use the Remote Viewing and Recording again, you must re-register to the service.

Home Network Settings

You can set the DLNA (Server) function. (⇨ 75)

Home Network function

You can switch between enable/disable of the DLNA (Server) and DMR (Media Renderer) function.

- If “On” is selected, the setting for “Quick Start” is fixed to “On”. (⇨ 101)
- If “Off” is selected, the setting for “Remote Viewing and Recording” is fixed to “Off”. (⇨ above)
- This cannot be set to “On” if the connection with the wireless broadband router is not encrypted in the wireless connection.

Setting device name

It is also possible to change the name of this unit on the network.

- Select from a preset list
  Select the preset name, then press [OK].
- Create name
  Enter the name.
  Refer to “Entering text”. (⇨ 107)

Conversion Setting for DLNA

- On:
  When playing back on DLNA (Client) compatible equipment, this setting reduces the chance of break-ups and freezing of an image by lowering the image quality.

- When this is set to “On”, switching the channel or starting playback will take longer.

Resolution Setting for DLNA

When “Conversion Setting for DLNA” is set to “On”, select the image quality.

Registration type for remote devices

- Automatic:
  All connected devices on the same network can access this unit.
- Manual:
  Only registered devices can access this unit.

Remote device list

- To register equipment manually
  1 Select the device name or the MAC Address for the device you want to register, then press [OK].
  2 Select “Yes”, then press [OK].
- To deregister equipment
  1 Select the registered equipment, then press [OK].
  2 Select “Yes”, then press [OK].

- This function cannot be enabled when “Automatic” is selected in “Registration type for remote devices”. (⇨ above)
- The maximum number of equipment that can be registered is 16.

Others

Standby Settings

Quick Start

- On:
  It is possible to start quickly from standby mode.
- Off:
  Power consumption in standby mode is minimized. (⇨ 118)
  However, startup time from standby mode will be longer.
- Timer Setting for Quick Start:
  “Quick Start” is activated when the set time comes.

- When “Home Network function” (⇨ 100) or “Remote Viewing and Recording” (⇨ 100) is set to “On”, the setting for this function is fixed to “On”.
- If “Off” or “Timer Setting for Quick Start” is selected, the setting for “Front Panel Display” in “Display” is fixed to “Automatic”. (⇨ 97)

Automatic Standby

Set the time to turn the unit to standby mode automatically.

When the unit is not operating, the unit will be turned to standby mode once the set time has passed.

- When “REWIND LIVE TV” is set to “On” (⇨ 94), “Off” cannot be selected.

Automatic Standby after OTR

- On:
  This unit is turned to standby mode when it is not operated for approximately 5 minutes after completing “Automatic Stop” or “Recording Time” (⇨ 34).

Basic Settings

Automatic Standby after Copy

• On:
This unit is turned to standby mode when it is not operated for approximately 5 minutes after completing copy (⇨ 61, Copying from media other than HDD with DIRECT NAVIGATOR, Copying titles with copying list).

BCT845 BCT745 BCT740
DVB-C **RF OUT (CATV Signal)**
DVB-T **RF OUT (Aerial Signal)**

Set whether to output the broadcasting signal from RF OUT or not while in standby mode (When “Quick Start” is not activated).

• If “On” is selected, the broadcasting signal is output from this unit.

Power Save for Network Standby

You can minimize power consumption in standby mode even when the “Quick Start” function is activated. (⇨ 118)

• When this is set to “On”, startup time when operating [GUIDE] and [DIRECT NAVIGATOR] from standby mode will be longer.

Remote Control

Change the remote control code on the main unit and the remote control if you place other Panasonic products close together.

• Use “Set Code 1”, the factory set code, under normal circumstances.

1 Select the code, then press [OK].
2 While pressing [OK], press and hold the number button ([1] to [6]) for more than 5 seconds.
3 Press and hold [OK] for more than 5 seconds.
4 Press [OK].

Clock

If the time is not set correctly, use the settings listed in the method below.

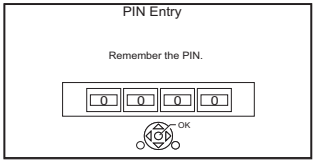
• Automatic
This unit usually obtains time and date information from digital broadcasts.
• Time Zone
When the time is not correct, set “Time Zone”. (GMT - 6 to + 6)
• Manual Setting
1 Select “Off” of “Automatic”, then press [OK].
2 Select the item you want to change.
3 Change the setting.
4 Press [OK] when you have finished the settings.

• When the clock is set manually, you cannot perform playing/recording/PAUSE LIVE TV/REWIND LIVE TV of the programmes that are copy protected (Retention limit). (⇨ 15)

PIN Entry

You can set/change the PIN for parental control.

1 Enter your 4-digit PIN with the number buttons.
2 Enter the new 4-digit PIN with the number buttons.
• Make a note of PIN in case you forget it.
e.g.,



3 Press [OK].

System Update

Software Update in Standby

When you set this unit to standby mode, software (firmware) updates (⇨ 104) are downloaded automatically at the time you have specified.

Software Update Now (Broadcast)

Refer to “Software (Firmware) Update”. (⇨ 104)

- BCT845 BCT745 BCT740 DVB-C Some cable providers do not support this function.

Software Update Now (Internet)

Refer to “Software (Firmware) Update”. (⇨ 104)

- Network connection and setting are required. (⇨ 21, 26)

Software Licence

Information about the software licence is displayed.

System Information

Display Software (firmware) version, HDAVI Control version and Wireless Module version (When using wireless connection only) of this unit.

Initialize

Shipping Condition

All the settings except for some settings return to the factory preset.

- The timer recording programmes are also cancelled.
- The device password is also initialized. (⇨ 100)

Default Settings

All the settings other than the tuning settings, clock settings, disc language settings, rating PIN, remote control code, device password, etc. return to the factory presets.

Language code list

Abkhazian:	6566	Lingala:	7678
Afar:	6565	Lithuanian:	7684
Afrikaans:	6570	Macedonian:	7775
Albanian:	8381	Malagasy:	7771
Amharic:	6577	Malay:	7783
Arabic:	6582	Malayalam:	7776
Armenian:	7289	Maltese:	7784
Assamese:	6583	Maori:	7773
Aymara:	6589	Marathi:	7782
Azerbaijani:	6590	Moldavian:	7779
Bashkir:	6665	Mongolian:	7778
Basque:	6985	Nauru:	7865
Bengali; Bangla:	6678	Nepali:	7869
Bhutani:	6890	Norwegian:	7879
Bihari:	6672	Oriya:	7982
Breton:	6682	Pashto, Pushto:	8083
Bulgarian:	6671	Persian:	7065
Burmese:	7789	Polish:	8076
Byelorussian:	6669	Portuguese:	8084
Cambodian:	7577	Punjabi:	8065
Catalan:	6765	Quechua:	8185
Chinese:	9072	Rhaeto-Romance:	8277
Corsican:	6779	Romanian:	8279
Croatian:	7282	Russian:	8285
Czech:	6783	Samoan:	8377
Danish:	6865	Sanskrit:	8365
Dutch:	7876	Scots Gaelic:	7168
English:	6978	Serbian:	8382
Esperanto:	6979	Serbo-Croatian:	8372
Estonian:	6984	Shona:	8378
Faroese:	7079	Sindhi:	8368
Fiji:	7074	Singhalese:	8373
Finnish:	7073	Slovak:	8375
French:	7082	Slovenian:	8376
Frisian:	7089	Somali:	8379
Galician:	7176	Spanish:	6983
Georgian:	7565	Sundanese:	8385
German:	6869	Swahili:	8387
Greek:	6976	Swedish:	8386
Greenlandic:	7576	Tagalog:	8476
Guarani:	7178	Tajik:	8471
Gujarati:	7185	Tamil:	8465
Hausa:	7265	Tatar:	8484
Hebrew:	7387	Telugu:	8469
Hindi:	7273	Thai:	8472
Hungarian:	7285	Tibetan:	6679
Icelandic:	7383	Tigrinya:	8473
Indonesian:	7378	Tonga:	8479
Interlingua:	7365	Turkish:	8482
Irish:	7165	Turkmen:	8475
Italian:	7384	Twi:	8487
Japanese:	7465	Ukrainian:	8575
Javanese:	7487	Urdu:	8582
Kannada:	7578	Uzbek:	8590
Kashmiri:	7583	Vietnamese:	8673
Kazakh:	7575	Volapük:	8679
Kirghiz:	7589	Welsh:	6789
Korean:	7579	Wolof:	8779
Kurdish:	7585	Xhosa:	8872
Laotian:	7679	Yiddish:	7473
Latin:	7665	Yoruba:	8979
Latvian, Lettish:	7686	Zulu:	9085

Software (Firmware) Update

You cannot operate the unit until the update is complete. Don't remove the AC mains lead during the update. Removing the AC mains lead while the update is in progress may damage the unit.

Update software (firmware) of this unit

Software of this unit can be updated automatically by the following methods at the specified time.

- **From broadcasts**
  (Default setting is 3 a.m. ⇨ 103, Software Update in Standby)
  - **BCT845** **BCT745** **BCT740**
    DVB-C The CATV terminal connection is not applicable to this function.
- **From Internet**
  Network connection and setting are required. (⇨ 21, 26)

If a software (firmware) update is available, a notification is displayed.

> New software version has been found.
> The software will be updated automatically after this unit is switched to standby.
> Do not disconnect the AC mains lead.

Update of the software (firmware) will start when the unit is turned to standby mode.

To update the software (firmware) immediately

Use the "Software Update Now (Broadcast)" function or "Software Update Now (Internet)" function. (⇨ 103)

- **BCT845** **BCT745** **BCT740**
  DVB-C Some cable providers do not support this function.

- It may take up to a few hours until the update is completed depending on the network environment.
- The timer recording always takes preference over the software (firmware) download; if the timer recording is scheduled to start, the downloading will be performed at the next opportunity.
- For the latest firmware update information, please refer to the Panasonic support site below.
- You can also download the latest software (firmware) from the following website.
  http://panasonic.jp/support/global/cs/

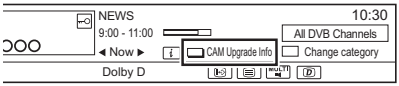
CI Plus compatible CAM software (firmware) update

Software (firmware) of CAM (compatible CI Plus) can be updated automatically from broadcasts. Availability of software (firmware) update is detected while viewing the programmes that are compatible with CI Plus.

1 When notification is displayed on the screen, select "Yes" and press [OK].

- If for some reason the notification is not displayed, or if cancelled, the notification is instead displayed on the channel information (⇨ 31).

e.g.,



To execute CAM software upgrade, press the red button.

2 Follow the instructions on the screen.

- Do not remove the CAM from this unit while updating.
- CAM software (firmware) update notice is not displayed in the following cases:
  - When recording a programme
  - When timer recording and CAM update occur simultaneously
  - When displaying FUNCTION MENU, DIRECT NAVIGATOR, etc.
- Operations such as view, playback, or record cannot be performed while upgrading the CAM.
  Any buttons on the remote control or the unit cannot be used while upgrading the CAM.
- If the timer recording is started, CAM software upgrade is cancelled to start recording.
- For details, refer to your CAM's operating instructions or consult your dealer.

Other operations

Media management

BD-RE BD-R RAM DVD-R DVD-RW +R +RW SD

1 Press [FUNCTION MENU].

2 Select “Media”, then press [OK].

3 Select the media, then press [OK].

4 Select the item, then press [OK].
- Selectable items will change depending on the selected item and inserted media.

Disc Name

BD-RE BD-R RAM DVD-R DVD-RW +R +RW

This function is to name a disc.
Refer to “Entering text”. (⇨ 107)

- The disc name is displayed in the Blu-ray Disc Management/DVD Management window.
- DVD-R DVD-RW +R With a finalised disc, the name is displayed on the Top Menu.
- +RW The disc name is displayed only if you play the disc on other equipment after creating Top Menu.

- Do not perform this operation before copying HD Video (AVCHD) to DVD-R or DVD-R DL. (⇨ 66)

Disc Protection

BD-RE BD-R RAM

Select “Yes”, then press [OK].

e.g.,

- To release the protection
  Repeat the same steps.
  - The screen icon will be switched to “Off”.

Delete all titles

BD-RE BD-R RAM

1 Select “Yes”, then press [OK].
2 Select “Start”, then press [OK].

- Photo data (JPEG/MPO) or computer data cannot be deleted.

Format Disc/Format Card

BD-RE RAM DVD-RW +RW SD
BD-R +R (New disc only)

Formatting deletes all contents (including computer data), and they cannot be restored. Check carefully before proceeding.

1 Select “Yes”, then press [OK].
2 Select “Start”, then press [OK].
3 Press [OK].

RAM To stop formatting

Press [RETURN ⮌].
- You can cancel formatting if it takes more than 2 minutes. The disc must be reformatted if you do this.

- The contents are deleted when you format a disc or card even if you have set protection.
- RAM Formatting normally takes a few minutes; however, it may take up to a maximum of 70 minutes.
- **Do not disconnect the AC mains lead while formatting.** This can render the disc or the card unusable.
- When a disc or card has been formatted using this unit, it may not be possible to use it on any other equipment.
- It will become DVD Video format when a DVD-RW recorded in DVD Video Recording format is formatted with this unit.

Other operations

Top Menu

DVD-R DVD-RW +R +RW

You can select the background for DVD-Video Top Menu.

Select the background, then press [OK].

Auto-Play Select

DVD-R DVD-RW +R +RW

You can select whether to show the Top Menu after finalising or creating Top Menu.

Select “Top Menu” or “Title 1”, then press [OK].

Top Menu:

The Top Menu appears first.

Title 1:

The disc content is played without displaying the Top Menu.

Finalise

DVD-R DVD-RW +R (You can play the disc on compatible DVD players by finalising it on the unit.)

BD-R (Finalising BD-R prevents accidental recording or editing.)

1 Select “Yes”, then press [OK].

2 Select “Start”, then press [OK].

3 Press [OK].

After finalising

- BD-R DVD-R +R The disc becomes play-only and you can no longer record or edit.
- DVD-RW You can record and edit the disc after formatting.

- You cannot cancel finalising.
- Finalising takes up to 15 minutes (Up to 60 minutes in case of DVD-R DL and +R DL).
- **Do not disconnect the AC mains lead while finalising.** This can render the disc unusable.
- Depending on the disc, it may take longer than displayed on the confirmation screen (approximately four times longer).
- You cannot finalise discs recorded on other manufacturer’s equipment.
- DVD-R DVD-RW +R If you finalise discs recorded on Panasonic equipment other than this unit, the background selected as “Top Menu” may not be displayed.
- Discs finalised on this unit may not be playable on other players due to the condition of the recording.

Create Top Menu

+RW

You can create Top Menu for displaying on other equipment.

Make selections from “Top Menu” and “Auto-Play Select” before creating Top Menu.

1 Select “Yes”, then press [OK].

2 Select “Start”, then press [OK].

3 Press [OK].

- You cannot use the Top Menu for playing on this unit.
- The created menu is deleted when you record or edit the disc.

HOLD function

The HOLD function deactivates all buttons on the unit and remote control.

Press and hold [OK] and [RETURN ⮌] simultaneously until “X HOLD” appears on the front panel display.

To cancel the HOLD function

Press and hold [OK] and [RETURN ⮌] simultaneously until “X HOLD” disappears.

Entering text

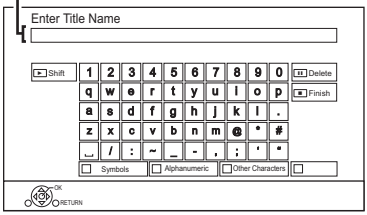
Preparation

- Show the “Enter Title Name” screen, etc.

1 Select a character, then press [OK].
Repeat this step to enter other characters.

e.g.,

Name field: shows the text you have entered



- To enter Alphanumeric characters:
  Press the green button, then select characters.
- To enter Symbols:
  Press the red button, then select characters.
- To enter Other Characters, such as umlaut mark or accent grave:
  Press the yellow button, then select characters.
- To delete a character:
  Select the character in the name field, then press [PAUSE ❚❚].
- To shift the alphabetic characters on the screen to upper case/lower case:
  Press [PLAY/×1.3 ►].

2 Press [STOP ■] (Finish).
“Writing...” appears then the screen returns to the previous screen and so on.

To end partway

Press [RETURN ⮌]. (Text is not added.)

- The maximum number of characters depends on the media.
- If a name is long, parts of it may not be shown in some screens.

Switching the aspect ratio of the screen

When the image does not match the screen size of the TV, you can enlarge the image to fill the screen.

1 Press [OPTION].

2 Select “Playback Settings” in “Playback Menu”, then press [OK].

3 Select “Aspect” in “Basic Operation”, then press [OK].

4 Select the item, then press [OK].

Normal:
Normal output

Side cut:
The black bars on the right and left sides of the 16:9 image disappear and the image is enlarged.

Zoom:
The black bars on the top and bottom sides of the 4:3 image disappear and the image is enlarged.

- This function does not work when watching 3D programme and playing back 3D title or 3D photo.
- It may also be adjusted using the screen mode of the TV etc.
- The screen mode is switched to “Normal” in the following situations:
  - when you change the channel
  - when you start or end the playback of a title
  - when you switch the unit on or to standby mode.
- BD-V DVD-V “Side cut” does not have any effect.
- When “TV Aspect” (⇨ 98) is set to “Pan & Scan” or “Letterbox”, the “Zoom” effect is disabled.

Troubleshooting guide

Before requesting service, make the following checks. If the problem still persists, consult your dealer for instructions.
Updating to the latest software (firmware) may solve the problem. (⇨ 104)

The followings do not indicate a problem with this unit:
• Regular disc rotating sounds or HDD rotating sounds.
• Poor reception due to atmospheric conditions.
• Image disturbance during search.
• Image disturbance when replacing 3D discs.
• Interruptions in reception due to periodic broadcasting breaks.
• When you switch the unit on or to standby mode, there may be an unexpected sound.

General operation

The unit does not work.

- Check the connections. (⇨ 16)
- One of the unit's safety devices may have been activated.

  Reset the unit as follows:

  1 Press [⏻/I] on the main unit to switch the unit to standby.
    - If the unit does not switch to standby, press [⏻/I] on the main unit for about 3 seconds. The unit is forcibly switched to standby. Alternatively, disconnect the AC mains lead, wait one minute, then reconnect it.

  2 Press [⏻/I] on the main unit to switch it on. If the unit still cannot be operated, consult the dealer.

Cannot eject a disc.

1 While the unit is in standby mode, press and hold [OK], the yellow button and the blue button at the same time for more than 5 seconds.
  - "00 RET" is displayed on the front panel display.

2 Repeatedly press [▶] (right) until "06 FTO" is displayed on the front panel display.

3 Press [OK].

The unit is switched to standby mode automatically.

- VIERA Link has worked. (⇨ 84, Power off link)

The remote control does not work.

- The remote control and main unit are using different codes. Change the code on the remote control.

Front panel display

Press and hold [OK] and the indicated number button at the same time for more than 5 seconds. (⇨ 102)

- Software (firmware) is updating when "UPDATE □/□" is displaying on the front panel display. Wait until the update is completed. (⇨ 104)
- The HOLD function is activated. (⇨ 106)

Startup is slow.

- Startup takes time in the following situations:
  - A disc is inserted.
  - The clock is not set.
  - Immediately after a power failure or the AC mains lead is connected.
  - When a BD-J application is executing.
  - When the "Quick Start" is not activated. (⇨ 101)
- Startup of this unit may be slower depending on the TV settings.

Displays

“0:00” is flashing on the front panel display.
- Set the clock. (⇨ 87, 102)

The clock does not display on the unit when switched to standby.
- The clock does not display when “Front Panel Display” is set to “Automatic”. (⇨ 97)

TV screen and video

Screen size is wrong.
- Check the “TV Aspect” or “Aspect for 4:3 Video”. (⇨ 98)
- Adjust the aspect ratio setting on TV.
- Adjust the aspect ratio setting on this unit. (⇨ 107)
- If you connect to 4:3 TV, set “HDMI Video Format” to “576p/480p”. (⇨ 87, 98)
- Check “Aspect for Recording” before recording or file conversion. (⇨ 87, 94)

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TV reception is not displayed.
- Broadcast signals are not output from this unit’s RF OUT terminal. Select “On” in “RF OUT (CATV Signal)” or “RF OUT (Aerial Signal)”. (⇨ 87, 102)

The black screen appears on the TV.
- This phenomenon may occur, depending on the TV setting, when “Quick Start” is activated. Depending on the TV, this phenomenon may be prevented by reconnecting to a different HDMI input terminal.

Picture does not appear with the HD quality although HD setting was made.
- The pictures are output with 576p/480p depending on the title.

The screen changes automatically.
- If “Screen Saver” is set to “On”, the screen saver function will be activated when there is no operation for 5 minutes or more. (⇨ 97)

There is a lot of image lag when playing video.
- Set to “0” all items in the “Noise Reduction”. (⇨ 86)
- Set “Audio Delay”. (⇨ 87, 97)

The images do not appear on the TV.
The picture is distorted during play, or video is not played correctly.
- Check the connections. (⇨ 16)
- Check the settings of the connected TV, etc.
- An incorrect resolution is selected in “HDMI Video Format”. (⇨ 87, 98) Reset the setting as follows:
  1. While the unit is on, press and hold [OK], the yellow button and the blue button at the same time for more than 5 seconds.
     - “00 RET” is displayed on the front panel display.
  2. Repeatedly press [▶] (right) until “04 PRG” is displayed on the front panel display.
  3. Press and hold [OK] for at least 3 seconds. Set the item again.
     - When Dolby Digital Plus, Dolby TrueHD, and DTS-HD® audio are not output properly, select “Yes” in “Default Settings” and make proper settings. (⇨ 87, 103)
- The unit’s TV System is different from that of the disc. Change the TV System. (⇨ 98, TV System)
- Picture may not be seen when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices.
- The picture may be distorted or a black screen may appear between scenes recorded with different aspect ratios.
- Set “Deep Colour Output” (⇨ 87, 98) or “Contents Type Flag” (⇨ 87, 99) to “Off”.

Troubleshooting guide

3D video is not output correctly.

- 3D video may be output correctly by changing the following settings:
  - "3D Type" of "3D Settings" (⇨ 98)
  - "Signal Format" (⇨ 53, 3D settings during playback)
- Check the settings of the connected TV.
- When a non-3D compatible amplifier/receiver is connected between this unit and a TV, 3D video is not output. (⇨ 19)
- When the amplifier/receiver which is connected between this unit and a TV is off, 3D video is not output. (⇨ 19)
- 3D discs may not be played back correctly due to the settings of the TV.
- When "HDMI Audio Output" is set to "Off", 3D video may not be output correctly. (⇨ 98)

The same video is displayed in each left and right half of the screen.

- This is a 3D programme of the Side-by-Side type.
  Change the setting as follows if connecting with a 3D compatible TV:
  1 Press [OPTION].
  2 Select "Playback Settings" in "Playback Menu", then press [OK].
  3 Select "3D Settings", then press [OK].
  4 Select "Side by side" in "Signal Format", then press [OK].

Sound

No sound.

Distorted sound.

- Check the connections. (⇨ 16)
- Check the settings of the connected TV, etc.
- Press [AUDIO] to select the audio. (⇨ 31, 52)
- To output audio from a device connected with an HDMI cable, set "HDMI Audio Output" to "On". (⇨ 87, 98)

Cannot change audio channel.

- You cannot change the audio channel if "Digital Audio Output" is set to "Bitstream" (⇨ 96)

Recording, timer recording and copying

Cannot record.

Cannot copy.

- Some broadcasts are copyright protected.
- You cannot record to the disc by pressing the [REC ●] or timer recording.
- The disc is protected. (⇨ 105)
- DVD-R DVD-RW +R +RW Since it will copy to HDD temporarily, copying is not possible if there is insufficient available capacity on the HDD.
- DVD-R DVD-RW +R +RW Copying or editing may not be possible on these discs after ejecting and loading the disc or switching the unit on or to standby mode for approximately 30 times after being copied to.
- This unit cannot record/copy NTSC signals to discs that already have PAL signal recordings.

A part or whole of a recorded title has been lost.

If there is a power failure or the AC mains lead is disconnected from the household mains socket while recording or editing, the title may be lost or the HDD may become unusable. We cannot offer any guarantee regarding lost programmes.

Timer recording does not work properly.

- Failed timer recordings are displayed in grey with ☒ on the Timer Recording screen. (⇨ 41)

  When you programme a timer recording, check the screen icons. If "!" is displayed, this timer programme may not be recorded because:
  - there is not enough space left.
  - the number of possible titles has reached its maximum.
  - programmes are deactivated, etc.
- If your CAM requires a PIN for timer recording, you need to enter PIN in advance. (⇨ 94, PIN Entry for Decrypt Recording)

Auto Renewal Recording does not work properly.

- The programme will not be overwritten in the following cases:
  - the programme is protected
  - any programme is being played back or copied
  - a screen such as DIRECT NAVIGATOR is displayed

  Instead, the programme will be saved as a separate programme and that will be overwritten.

An unusually loud sound is coming from the rotating disc.

- If you want copy to perform more quietly, select "Normal (Silent)" in "Disc Speed for High Speed Copy". (⇨ 87, 95)

The time recorded on the disc and the available time shown do not add up.

- DVD-R +R If you record or edit many times, the remaining capacity is reduced and then recording or editing may be disabled.
- Available disc space display may be different from actual.

Encrypted titles cannot be decrypted.

- Depending on the encrypted service, it may not be possible to decrypt certain content.

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Keyword Recording does not work properly.

- The Keyword Recording function can search the First 250 channels listed on "All DVB Channels" or the First 50 channels registered for "Favourites1". (⇨ 90, 92)
- The unit may not record a Keyword Recording programme when part of its broadcast time overlaps with that of another timer-recording programme. When this occurs, the Keyword Recording does not start even after the timer-recording has finished.
- The unit cannot run a search correctly if Search Conditions are not appropriate. Revise the Search Conditions. (⇨ 42)
- When "Search Channel" is set to "First 50 Favourites1", the unit does not search for programmes unless you register channels to "Favourites1".

Play

Cannot play back.

- The disc is dirty. (⇨ 10)
- The disc is scratched or marked.
- The disc may not be able to play back if it was not finalized or a Top Menu was not created on the equipment used for recording.
- Refer to "Screen icons". (⇨ 44)
- Depending on the encrypted service, it may not be possible to play back certain titles if they have been recorded without being decrypted.

Audio and video momentarily pause.

- DVD-R DL and +R DL discs have two writable layers on one side. Video and audio may momentarily cut out when the unit is switching layers.

BD-Video or DVD-Video is not played.

- Ensure the disc is for the correct BD-Video region code or DVD-Video region number, and is not defective. (⇨ 9)

Troubleshooting guide

You have forgotten your rating PIN.

- The rating level returns to the factory preset.
  1. While the unit is on, press and hold [OK], the yellow button and the blue button at the same time for more than 5 seconds.
     - "00 RET" is displayed on the front panel display.
  2. Repeatedly press [▶] (right) until "03 VL" is displayed on the front panel display.
  3. Press [OK].
     - "INIT" is displayed on the front panel display.

Image for the Quick View is not smooth.

- Image may not be played back smoothly in case of high definition titles.

Cannot play the disc on other players.

- Refer to "Play on other players". (⇨ 9)

Edit

The available recording time does not increase even after deleting titles on the disc.

- BD-R DVD-R +R Available space on the disc does not increase even after deleting titles.
- DVD-RW +RW Available space on the disc increases when you delete the last title.

Cannot edit.

- You may not be able to edit on the HDD if there is no available space. Delete any unwanted titles to create empty space. (⇨ 54)

Cannot create a video playlist.

- Creation or editing of playlists cannot be done on this unit.

Photo

The contents of the SD card cannot be read.

- Remove the card from the slot and then insert again. If this does not solve the problem, switch the unit to standby mode and turn it on again.

Copying, deleting and setting protection takes a long time.

- When there are a lot of folders and files, it may sometimes take a long time.

Photos do not play back normally.

- The images that were edited on the PC, such as Progressive JPEG, etc., may not play back. (⇨ 120)

USB

This unit does not recognize the USB device correctly.

- If inserted during playback the USB device may not be recognized by this unit.
  Disconnect and reconnect the USB device. If it still does not recognize the connection, switch the unit to standby mode and turn it on again.
- USB devices connected using a USB extension cable other than a dedicated one or a USB hub may not be recognized by this unit.
- This unit does not recognize USB HDDs other than those in which the size of one sector is 512-bytes or 4096-bytes. (For details, consult the dealer of your USB HDD.)

TV Guide

The TV Guide information is not displayed properly.

- Set the clock correctly. (⇨ 87, 102, Clock)
- Some broadcast may not send programme information.
- There was a programme change, or TV Guide information from a broadcast station was possibly not correctly transmitted.
- If signal quality is bad, the TV Guide system may not be able to receive any data.
- It may take time until the TV Guide screen is displayed correctly. Wait for about a day.

Broadcast

Picture regularly breaks up on some channels.

- Adjust the reception with “Manual Tuning”. (⇨ 87, 90, 92)

The channel which was once selectable cannot be selected.

- Reveal the channel on the channel list. (⇨ 90, 92)

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Digital broadcasts cannot be received.

- To receive an encrypted broadcast, a CI module valid for the broadcast is required.

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Digital broadcasts cannot be received.

- The dish may not be pointing in the direction of the satellite. If problem persists consult your local TV aerial installer.
- To receive an encrypted broadcast, a CI module valid for the broadcast is required.
- When you use only one terminal, you may not view correctly if you connect the satellite cable to the LNB IN 2 terminal.

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Major channels and favourite channels are not displayed on the top part of the channel list.

- DVB-C To change channel allocation, restart Auto Setup in Basic Settings menu and change channel number allocation selection. (⇨ 89)
- You can change channel number assignment. (⇨ 90)

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DVB-T **Picture very infrequently breaks up on some or all channels.**

- Electrical atmospheric interference caused by bad weather may cause pictures to break up and audio to mute or distort momentarily.

BST845 BST745 BST740

Picture very infrequently breaks up on some or all channels.

- Electrical atmospheric interference caused by bad weather may cause pictures to break up and audio to mute or distort momentarily.
- The receiver (LNB) of the satellite dish must be suitable for digital reception.

Troubleshooting guide

VIERA Link

VIERA Link does not work.

- Some functions may not work depending on the version of “HDAVI Control” of the connected TV, etc. This unit supports “HDAVI Control 5” functions.
- Check the settings of the connected TV, etc.
- If the connection for the equipment connected with HDMI was changed, or if there was a power failure or the plug was removed from the household mains socket, “HDAVI Control” may not work.
  In this case, change TV (VIERA) setting for “HDAVI Control” again.
- This unit does not support “ONE TOUCH PLAY” function of the Panasonic AV Control Receiver.

Network

You cannot access this unit from DLNA compatible equipment on the network.

- Check the network connection and the network settings. (⇨ 21, 26)
- It may not be possible to connect depending on the types of the equipment or the status of the equipment.

When using this unit as a server, video frames are dropped.

- Change the following settings:
  - Conversion Setting for DLNA (⇨ 87, 101)
  - Resolution Setting for DLNA (⇨ 87, 101)

You cannot play contents properly from DLNA compatible equipment on the network.

- There may be some video that cannot be played back on DLNA compatible equipment depending on the equipment.
- Following titles may not be played back:
  - A title with access restriction
  - A title with contents protection (⇨ 15)
  - A title with incompatible format
  - An encrypted title ( )
- Playback via DLNA compatible equipment may not be performed when this unit is in the following conditions:
  - While playing back a BD-Video
  - While simultaneously performing High speed copy and recording
  - While displaying the Basic Settings menu
  - While executing functions using a network, such as Network Service
- You cannot play back simultaneously from two or more items of DLNA compatible equipment.
- If the DLNA compatible equipment is not capable of outputting HE-AAC audio format, etc., sound may not be played back.

When using Wireless LAN connection, video from the DLNA Certified media server is not played back or video frames are dropped during playback.

- Use 802.11n (2.4 GHz or 5 GHz) Wireless router.
  Simultaneous use with a microwave, cordless telephone etc. at 2.4 GHz may result in connection interruptions or other problems.
- On the “Wireless Settings” screen (⇨ 99), the continuous lighting of at least four “Reception” indicators is the target for a stable connection. If three or fewer indicators are lit or the connection is being interrupted, change the position or angle of your Wireless router. If there is no improvement, connect to a wired network and perform the “Easy Network Setting” (⇨ 26, 99) again.

Reset

To return all the settings to the factory preset

Perform “Shipping Condition” or “Default Settings”. (⇨ 87, 103)

Messages on the front panel display

The following messages or service numbers appear on the front panel display when something unusual is detected.

BD □
("□" stands for a number.)

The remote control and main unit are using different codes. Change the code on the remote control. (⇨ 108)

CAM Upgrade

CAM is being updated. (⇨ 104)

Conversion

Selected titles in the USB HDD are being converted.
Do not disconnect the USB HDD from this unit.

GUIDE

TV Guide data is being downloaded.

Hard Error

If there is no change after switching the unit to standby mode and turning it on, consult the dealer.

No ERASE

You cannot delete items on this disc.
The disc may be damaged.

NoREAD

- The disc is dirty. (⇨ 10) The unit cannot record, play, or edit.
- The lens cleaner has finished cleaning. Press [▲ OPEN/CLOSE] on the main unit to eject the disc.

No WRITE

You cannot write to this disc.
The disc may be damaged. Use a new disc.

Please wait

- Displayed when the unit is started and is switched to standby mode.
- There was a power failure or the AC plug was disconnected while the unit was on. The unit is carrying out its recovery process. Wait until the message disappears.

Programme Full

There are already 32 timer programmes. Delete unnecessary timer programmes. (⇨ 41)

Remove

The USB device is drawing too much power.
Remove the USB device.

Start

Update of the software (firmware) is started.
You cannot operate the unit until the update is complete. (⇨ 104)

SW-DL

Software (firmware) is downloading.
Download will stop when the unit is turned on, or the timer recording starts. (⇨ 104)

Unsupport

The media is not supported.

Troubleshooting guide

UPDATE □/□
("□" stands for a number.)

The software (firmware) is being updated.
You cannot operate the unit until the update is complete. (⇨ 104)

U59

The unit is hot.
The unit switches to standby for safety reasons. Wait for about 30 minutes until the message disappears.
Install or place this unit with good ventilation.

U61

(When a disc is not inserted) A malfunction has occurred. The unit is trying to restore to the normal operation. Once the message disappears you can use the unit again.
If it remains displayed, consult the dealer.

U76

HDMI cannot be output because it is connected to a model that does not support copyright protection.

U77

Due to the current disc not having authorised copyright information, video output is not performed.

U88

(When a disc is inserted) There was something unusual detected with the disc or the unit. The unit is trying to restore to the normal operation. Once the message disappears you can use the unit again.
If it remains displayed, consult the dealer.

U99

The unit fails to operate properly. Press [⏻/I] on the main unit to switch the unit to standby mode. Now press [⏻/I] on the main unit again to turn the unit on.

X HOLD

The HOLD function is activated. (⇨ 106)

H□□ or F□□
("□" stands for a number.)

There is something unusual. (The service number displayed after H and F depends on the unit's condition.)
Reset the unit as follows:

1 Disconnect the plug from the household mains socket, wait a few seconds, then reconnect it.
2 Press [⏻/I] to turn the power on. (The unit may be fixed.)

Request service from the dealer. Inform the dealer of the service number when requesting service.

When you experience problems with Easy Network Setting

If there is any problem, the following message is displayed on the screen.

Wireless Settings

Display	Check the following
A conflict with other devices occurred.	• Please wait a few moments, and then try again.
A time out error occurred.	• Setting of the Wireless router for MAC Address etc. • The signal may be weak. • The SSID and the encryption key of the Wireless router. • Please wait a few moments, and then try again.
An authentication error or a time out error occurred.	
A device error occurred.	• If the problem is not solved, consult your dealer.

Easy Network Setting (Home Network Connection Check)

Display		Check the following
1. LAN cable connection or Wireless setting:	“Fail”	• Connection of the LAN cables (⇨ 21) • Settings of the hub and router
2. IP address setting:	“Fail”	
3. Connection to gateway:	“Fail”	

Display		Check the following
1. LAN cable connection or Wireless setting:	“Pass”	• Connection and settings of the hub and router • Settings of “IP Address / DNS Settings” (⇨ 87, 100)
2. IP address setting:	“Fail”	
3. Connection to gateway:	“Fail”	
1. LAN cable connection or Wireless setting:	“Pass”	
2. IP address setting:	“Pass”	
3. Connection to gateway:	“Fail”	
1. LAN cable connection or Wireless setting:	“Pass”	
2. IP address setting:	“Home network available”	
3. Connection to gateway:	“Fail”	

Easy Network Setting (Internet Connection Test)

Display	Check the following
Cannot find the server. (B019)	• “Primary DNS” and “Secondary DNS” settings of “IP Address / DNS Settings” (⇨ 87, 100)
No connection could be made to the server. (B020)	• The server may be busy or the service may have been suspended. Please wait a few moments, and then try again. • Settings of “Proxy Server Settings” (⇨ 87, 100) and the router.

Specifications

Specifications are subject to change without notice.

■ General

Dimensions: 430 mm (W)
BCT845 BST845 63 mm (H)
BCT745 BCT740 BST745 BST740 59 mm (H)
(excluding the projecting parts)
199 mm (D)
(including the projecting parts)
210 mm (D)

Mass: BCT845 BST845 Approx. 2.8 kg
BCT745 BCT740 BST745 BST740 Approx. 2.2 kg

Power supply: AC 220 V to 240 V, 50 Hz

Power consumption: BCT845 Approx. 36 W
BST845 Approx. 56 W
BCT745 BCT740 Approx. 33 W
BST745 BST740 Approx. 53 W

"Quick Start" is activated and "Power Save for Network Standby" is set to "Off"
Approx. 7 W
"Quick Start" is activated and "Power Save for Network Standby" is set to "On"
Approx. 6 W
"Quick Start" is not activated and "RF OUT (Aerial Signal)" is set to "Off"
BCT845 BCT745 BCT740 Approx. 0.2 W
"Quick Start" is not activated
BST845 BST745 BST740 Approx. 0.2 W

Operating temperature: 5 °C to 40 °C
Operating humidity range: 10 % to 80 % RH (no condensation)

■ TV system

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Tuner System: DVB-C/T
Country: Germany, Austria, Switzerland
Channel coverage: VHF: 5 - 12
UHF: 21 - 69
CATV :S1 - S20 (M1 - U10) 7 MHz Band
D051 - D073
D113 - D858

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Tuner System: DVB-S/DVB-S2
Antenna receive frequency: 950 MHz to 2150 MHz
Input impedance: Nominal 75 Ω
Demodulation: QPSK, 8PSK
LNB input: F shape terminal female, power supply 13 V/18 V max. 400 mA
DiSEqC: Version 1.0 or Tone burst A/B, 22 kHz 0.65 Vp-p

■ Recording system

DR mode: Partial TS
HG, HX, HE, HL, HM mode: MPEG-4 AVC/H.264, Dolby Digital
XP, SP, LP, EP mode: MPEG-2 (Hybrid VBR), Dolby Digital

■ Input terminal

AV in (21 pin): 1 pc.
Analogue video input (PAL/NTSC/SECAM): 1 Vp-p (75 Ω)
Analogue audio input (L/R): Standard: 0.5 Vrms, Full scale: 2.0 Vrms at 1 kHz (> 10 kΩ)

■ Output terminal

Audio out (pinjack): 1 pc.
Analogue audio output (L/R): Standard: 0.5 Vrms, Full scale: 2.0 Vrms at 1 kHz (< 1 kΩ)
Digital audio out (optical): 1 pc.
Output format: PCM, Dolby Digital, DTS®, MPEG

■ HDMI terminal

HDMI out (19 pin type A): 1 pc.
Output format: PCM, MPEG, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS®, DTS-HD High Resolution Audio™, DTS-HD Master Audio™

- This unit supports "HDAVI Control 5" function.

■ Internal HDD capacity

BCT845 BST845 1 TB
BCT745 BCT740 BST745 BST740 500 GB

■ Other terminals

USB Port (Type A): 2 pcs.
SD Card Slot: 1 pc.
Common Interface slot: 2 pcs.
LAN (Ethernet) Port: 1 pc. 10BASE-T/100BASE-TX

■ **Wireless LAN**

Standard compliance: IEEE802.11a/b/g/n
Frequency range: 2.4 GHz/5 GHz band
Security※:
WPA™/WPA2™ (Encryption type: TKIP/AES, Authentication type: PSK)
WEP (64 bit/128 bit)

※ This unit supports WPA™ and WPA2™ encryption.

■ **Recordable discs**

BD-RE (SL/DL): 1-2X SPEED (Ver. 2.1)
BD-R (SL/DL): 1-2X SPEED (Ver. 1.1), 1-4X SPEED (Ver. 1.2), 1-6X SPEED (Ver. 1.3), 1-2X SPEED LTH type (Ver. 1.2), 1-6X SPEED LTH type (Ver. 1.3)
DVD-RAM: 2X SPEED (Ver. 2.0), 2-3X SPEED (Ver. 2.1), 2-5X SPEED (Ver. 2.2)
DVD-R (SL): 1X SPEED (Ver. 2.0), 1-4X SPEED (Ver. 2.0), 1-8X SPEED (Ver. 2.0), 1-16X SPEED (Ver. 2.1)
DVD-R (DL): 2-4X SPEED (Ver. 3.0), 2-8X SPEED (Ver. 3.0)
DVD-RW: 1X SPEED (Ver. 1.1), 1-2X SPEED (Ver. 1.1), 2-4X SPEED (Ver. 1.2), 2-6X SPEED (Ver. 1.2)
+R (SL): 2.4X SPEED (Ver. 1.0), 2.4-4X SPEED (Ver. 1.1), 2.4-8X SPEED (Ver. 1.2), 2.4-16X SPEED (Ver. 1.3)
+R (DL): 2.4X SPEED (Ver. 1.0), 2.4-8X SPEED (Ver. 1.1)
+RW: 2.4X SPEED (Ver. 1.1), 2.4-4X SPEED (Ver. 1.2)

■ **Optical pick-up**

System with 2 lenses, 3 integration units (405 nm wavelength for BDs, 661 nm wavelength for DVDs, 783 nm wavelength for CDs)

■ **LASER specification**

Class 1 LASER Product
Wave length: 405 nm (BDs), 661 nm (DVDs), 783 nm (CDs)
Laser power:
No hazardous radiation is emitted with the safety protection

■ **Recording system**

BD-RE (SL/DL): Blu-ray Disc Rewritable Format
BD-R (SL/DL): Blu-ray Disc Recordable Format
DVD-RAM: DVD Video Recording format
DVD-R (SL/DL): DVD-Video format, AVCHD format
DVD-RW: DVD-Video format
+R (SL/DL), +RW

■ **Copying speed from HDD to BD-R in High Speed Copy**

HDD (HM, 1 hour) → 6X Speed BD-R
Copying speed: 60x
Required time: Approx. 1 min.

- The above rate in the list indicates the shortest time and fastest speed required for copying one-hour title from HDD to the disc by High-Speed copying.
- The required amount of time and speed may vary depending on the conditions such as the area where information is written or unique feature on the disc.

■ **Region code**

DVD: #2
BD: Region B

■ **Playable disc**

BD-Video (Blu-ray 3D, BD-Live)
BD-ROM Version 2.4
DVD-Video: DVD-Video format
CD-DA (Audio CD)
BD-RE: Ver. 2.1, JPEG※1, MPO※1
BD-RE DL: Ver. 2.1, JPEG※1, MPO※1
BD-R: Ver. 1.3, LTH type Ver. 1.3, Xvid※1, MKV※1
BD-R DL: Ver. 1.3, Xvid※1, MKV※1
DVD-RAM: DVD Video Recording format, AVCHD format, JPEG※2, MPO※2
DVD-R: DVD-Video format※3, AVCHD format※3, JPEG※2, MPO※2, MP3※2, Xvid※2, MKV※2
DVD-R DL: DVD-Video format※3, AVCHD format※3, JPEG※2, MPO※2, MP3※2, Xvid※2, MKV※2
DVD-RW: DVD-Video format※3, DVD Video Recording format, AVCHD format※3
+R: Video※3, AVCHD format※3
+R DL: Video※3, AVCHD format※3
+RW: Video※3, AVCHD format※3
CD-R/CD-RW: CD-DA, JPEG※2, MPO※2, MP3※2, Xvid※2, MKV※2

※1 BD disc needs to be based on UDF format.
※2 DVD/CD discs need to be based on UDF or ISO9660 format.
※3 Finalising is necessary.

Specifications

■ SD Card

Compatible media: SD Memory Card※1
Format: FAT12, FAT16, FAT32, exFAT※2
Data that can be played: JPEG, MPO, AVCHD format, MP4

※1 Includes SDHC/SDXC cards.
Includes miniSD™ cards (need a miniSD™ adaptor).
Includes microSD™/microSDHC™/microSDXC™ cards (need a microSD™ adaptor).

※2 SDXC only

■ USB device

USB standard: USB2.0 High Speed
Format: FAT12, FAT16, FAT32, NTFS
Data that can be played: MP3, JPEG, MPO, Xvid, MKV, MP4, MPEG-2

Audio information

The audio output differs depending on which terminals are connected to the amplifier/receiver, and the setting on this unit. (⇨ 96, Digital Audio Output)

- The number of channels listed is the maximum possible number of output channels when connected to amplifier/receiver compatible with the respective audio format.

Terminal	Digital Audio Output	
	Bitstream	PCM
HDMI AV OUT	Output using original audio※1	BD-Video: 7.1ch PCM※1, 2, 3, 4 DVD-Video: 5.1ch PCM※3
DIGITAL AUDIO OUT	Dolby Digital/ DTS Digital Surround™	Down-mixed 2ch PCM

※1 When “BD-Video Secondary Audio” is set to “On”, the audio will be output as Dolby Digital, DTS Digital Surround™ or 5.1ch PCM.

※2 The audio output is amplified from 5.1ch or 6.1ch to 7.1ch depending on the DTS, Inc. specifications.

※3 **BCT745** **BCT740** **BST745** **BST740**
The maximum possible number of Dolby sound is 2ch PCM.

※4 **BCT845** **BST845**
The maximum possible number of Dolby sound is 5.1ch PCM.

Maximum numbers of titles that can be recorded

HDD, USB HDD	3000 titles (When continuously recording for long durations, titles are automatically divided every 8 hours.)
BD-RE, BD-R	200 titles on one disc.
DVD-RAM, DVD-R, DVD-RW	99 titles on one disc.
+R, +RW	49 titles on one disc.

Information for the files other than recorded programmes

■ JPEG/MPO

Playable media: HDD, BD-RE (SL/DL), DVD-RAM, DVD-R, DVD-R DL, CD-R, CD-RW, SD Card, USB device
Compatible pixels: Between 34×34 and 8192×8192 pixels (Sub sampling is 4:2:2 or 4:2:0)
Files: JPEG conforming to DCF (Design rule for Camera File system)
MPO conforming to MPF (Multi Picture Format)

Maximum numbers of folders and files:

Media	Maximum folders	Maximum files
HDD	–	20000
BD-RE	500	10000
DVD-RAM	500	10000
DVD-R	500	10000
CD-R, CD-RW	500	10000
SD Card	500	10000
USB device	500	10000

- This unit is not compatible with Motion JPEG.

■ **MP3**

Playable media: HDD, DVD-R, DVD-R DL, CD-R, CD-RW, USB device

Compression rate: 32 kbps to 320 kbps
Sampling rate: 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz

Maximum numbers of folders and files:

Media	Maximum folders	Maximum files
HDD	–	40000
DVD-R	300	3000
CD-R, CD-RW	300	3000
USB device	300	3000

■ **MKV**

Playable media: BD-R (SL/DL), DVD-R, DVD-R DL, CD-R, CD-RW, USB device

MPEG-4 AVC (H.264) profile is up to High Profile, Level 4.
AAC-LC, MP3, Dolby Digital audio, PCM, Vorbis and FLAC can be decoded.

Maximum number of folders: 300 folders (including the root folder)
Maximum number of files: 200 files

■ **MP4**

Playable media: SD Card, USB device
MPEG-4 AVC/H.264: Up to High Profile, Level 4.2
Video resolution: Up to 1920×1080
MPEG-4 AAC-LC
Sampling rate: 8 kHz to 48 kHz
Number of audio channel: 1 or 2

■ **HD-Video (High Definition)**

Playable media: SD Card, USB device
Codec: MPEG-4 AVC/H.264
File Format: AVCHD format conforming

Recording modes and approximate recording times

Depending on the content being recorded, the recording time may become shorter than indicated.

■ **DR mode**

Recording Mode	HDD		BD-RE, BD-R	
	BCT845 BST845 (1 TB)	BCT745 BCT740 BST745 BST740 (500 GB)	Single Layer (25 GB)	Dual Layer (50 GB)
DR (HD quality)	150 hours	75 hours	3 hours 30 min.	7 hours 30 min.
DR (SD quality)	422 hours	211 hours	10 hours 15 min.	21 hours

- **Recording time of DR mode may vary depending on the bit rate of broadcasting:**
  - High Definition (HD) quality: estimated bit rate is 14 Mbps
  - Standard Definition (SD) quality: estimated bit rate is 5 Mbps
- **Regarding recording time remaining:**
  Remaining time in the DR mode is calculated with a bit rate of 14 Mbps. But the bit rate differs depending on the broadcast, so the displayed remaining time might be different from the actual remaining time.

Specifications

■ HG, HX, HE, HL, HM modes

Recording Mode	HDD		BD-RE, BD-R	
	BCT845 BST845 (1 TB)	BCT745 BCT740 BST745 BST740 (500 GB)	Single Layer (25 GB)	Dual Layer (50 GB)
HG	157 hours	78 hours	4 hours	8 hours
HX	235 hours	117 hours	6 hours	12 hours
HE	353 hours	176 hours	9 hours	18 hours
HL	472 hours	235 hours	12 hours	24 hours
HM	684 hours	341 hours	17 hours 30 min.	35 hours

■ XP, SP, LP, EP modes

Recording Mode	HDD		BD-RE, BD-R	
	BCT845 BST845 (1 TB)	BCT745 BCT740 BST745 BST740 (500 GB)	Single Layer (25 GB)	Dual Layer (50 GB)
XP	215 hours	107 hours	5 hours 15 min.	10 hours 30 min.
SP	431 hours	215 hours	10 hours 30 min.	21 hours
LP	862 hours	430 hours	21 hours	42 hours
EP	1724 hours	860 hours	42 hours	84 hours

Recording Mode	DVD-RAM		DVD-R, DVD-RW, +R, +RW (4.7 GB)	DVD-R DL, +R DL (8.5 GB)
	Single-sided (4.7 GB)	Double-sided (9.4 GB)		
XP	1 hour	2 hours	1 hour	1 hour 45 min.
SP	2 hours	4 hours	2 hours	3 hours 35 min.
LP	4 hours	8 hours	4 hours	7 hours 10 min.
EP	8 hours	16 hours	8 hours	14 hours 20 min.

- **Regarding recording time remaining:**
  This unit records using a VBR (Variable bit rate) data compression system to vary recorded data segments to match video data segments which may cause differences in the displayed amount of time and space remaining for recording.

CE 1731 !

Declaration of Conformity (DoC)

Hereby, "*Panasonic Corporation*" declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Customers can download a copy of the original DoC to our R&TTE products from our DoC server:

http://www.doc.panasonic.de

Contact to Authorised Representative: Panasonic Marketing Europe GmbH,

Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Germany

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This product is intended for general consumer. (Category 3)

The WLAN feature of this product shall exclusively be used inside buildings.

This product on purpose to connect to access point of 2.4 GHz or 5 GHz WLAN.

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The software licenses are displayed when "Software Licence" in the Basic Settings menu is selected. (⇨ 103)

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BCT: **BCT845** **BCT745** **BCT740**
BST: **BST845** **BST745** **BST740**

Disposal of Old Equipment and Batteries
Only for European Union and countries with recycling systems

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste.
For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.
By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.
For more information about collection and recycling, please contact your local municipality.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Note for the battery symbol (bottom symbol):
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

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CAUTION –	CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM. IEC60825-1/CLASS 3B
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VARO –	AVATTAESSA OLET ALTTIINA LUOKAN 3B NÄKYVÄÄ JA NÄKYMÄTÖNTÄ LASERSÄTEILYÄ. VARO ALTISTUMISTA SÄTEELLE.
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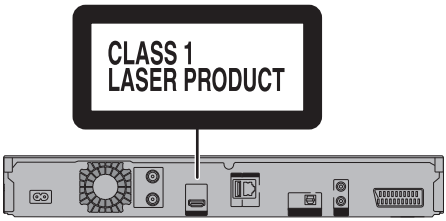
(Inside of product)

BCT845 **BCT745** **BCT740**



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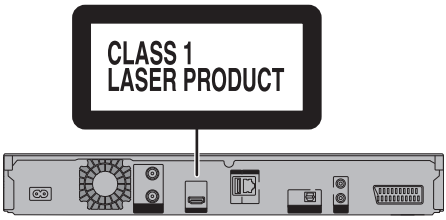

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